SINGER

SINGER SEWING MACHINES

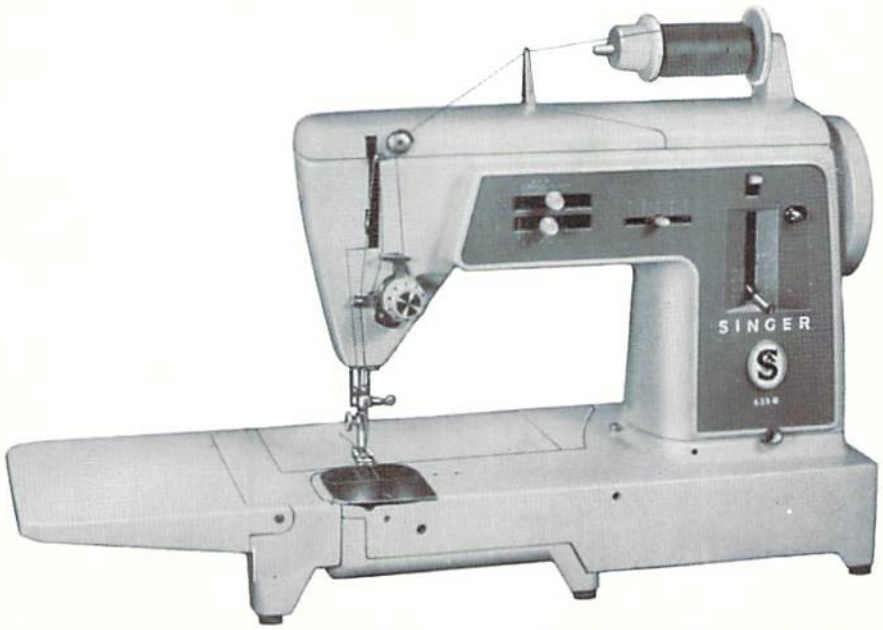
631
Convertible

Instructions for using SINGER*

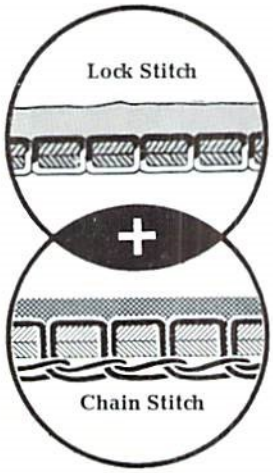
* A Trademark of THE SINGER COMPANY

Form 30-047 G (265) engl. Printed in Western Germany

31*



— the best sewing machine ever built by SINGER



The SINGER Convertible 631 — a truly remarkable machine with CHAIN STITCH feature

. . . represents the ultimate in sewing machine performance. With the purchase of the new SLANT-O-MATIC, you can take pride in owning the finest sewing machine ever built. You'll marvel at its almost unbelievable ease of operation . . . the remarkable services it performs. You'll delight in its perfect, beautiful stitching. In addition to its numerous outstanding advantages the machine now incorporates a new and unique feature in that lock stitching and chain stitching can be selectively produced on the same machine.

- **Only SINGER produces an automatic that in addition to the conventional lock stitch, but also a single thread chain stitch which can be used for basting seams thus replacing hand-basting. This feature will release you from time-consuming work and it reveals new aspects so far non-existent in the overall picture of the applications of the modern family sewing machine. (For detailed instructions concerning operation and application, see page 20.)**
- **SINGER has WORLD'S FIRST AUTOMATIC** with slant needle and gear drive. Seeing is easier, sewing smoothest ever. No slipping or stalling.
- **SINGER has WORLD'S FIRST AUTOMATIC** with double-easy threading. Has built-in threading chart, handy "drop-in" bobbin in front of needle!
- **SINGER has WORLD'S FIRST AUTOMATIC** with a built-in eye-level stitch chart, with push button selection for whatever fancy stitch you want!

Copyright 1965 by THE SINGER COMPANY

OTHER OUTSTANDING FEATURES ARE:

- **CYLINDER BED** simplifies sewing of articles of a curved or cylindrical nature — converts to flat bed with the push of a button.
- **PERFECT STITCHING** . . . straight and zigzag.
- **NEEDLE CLAMP** holds one or two regular needles — same or different sizes for exciting two needle stitching.
- **NEW TYPE SPOOL HOLDER** ensures a smooth flow of the needle thread.
- **THROAT PLATE** with seam guide markings. Held with magnets for easy removal and replacement.
- **SUPERFINE CONTROL** of stitch length ensures perfect satin stitching.
- **PRESSURE OF PRESSER FOOT** can easily be adjusted according to regulator.
- **HINGED FACE PLATE,** houses threading chart and swings open for easy access to oiling points.
- **BUILT-IN MOTOR** with worm wheel drive, no belts required, excellent penetrating power when sewing heaviest materials without manual assistance (electric drive).
- **BUILT-IN LIGHT** focused on sewing area, which swings down for easy bulb replacement.
- **ALL MECHANISM** completely enclosed.
- **SPECIAL PURPOSE FOOT.**
- **FLEXIBLE SEAM GUIDE.**
- **HINGED BED EXTENSION** for increased work area.
- **COMPARTMENT** for attachments and accessories built into detachable cloth plate.

TO GET THE MOST ENJOYMENT
FROM YOUR SINGER 631

Take advantage of the free sewing lessons to which you are entitled! Skilled, SINGER-trained teachers will give you personal guidance and assist you in learning the fundamentals of home sewing.

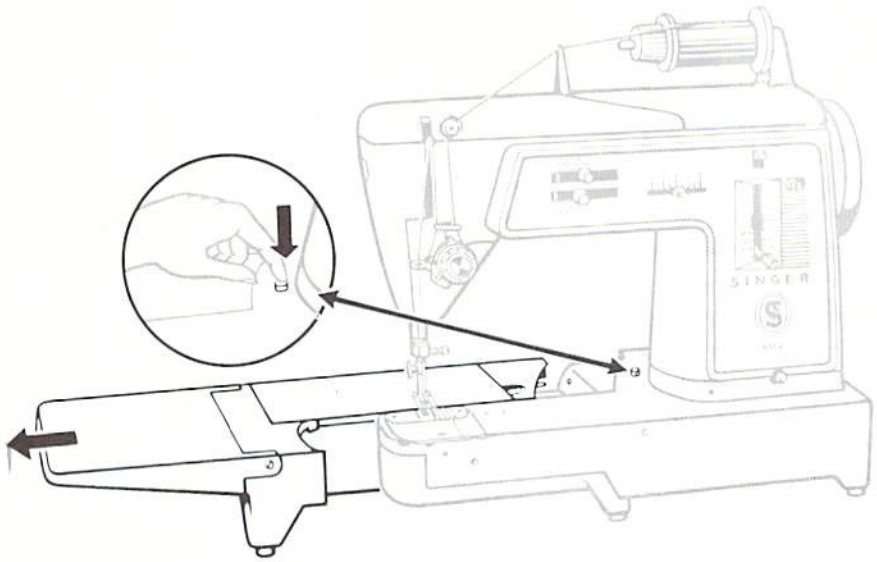
SINGER SERVICE

Wherever you go you will find expert, dependable SINGER* Service close at hand. SINGER is interested in helping you keep your SINGER Sewing Machine in top running condition. That is why you should always call your SINGER SEWING CENTRE if your machine ever requires adjustment or repair. Only from your SINGER SEWING CENTRE can you obtain the services of a trained SINGER repair man and warranted SINGER* parts.

EVERYTHING FOR THE WOMAN WHO SEWS

The answer to your sewing needs is at your SINGER SEWING CENTRE. There you will find a wide choice of sewing aids, notions, sewing instructions and services. Look for the famous red "S" and SINGER trademarks on your SINGER SEWING CENTRE and the ever ready SINGER van. See phone book under SINGER SEWING MACHINE CO. for address nearest you.

TO REMOVE AND REPLACE DETACHABLE CLOTH PLATE



To detach cloth plate from machine, press button on machine bed and withdraw plate.

Replace cloth plate in same manner, locating two pins in plate with corresponding holes in machine bed. Push cloth plate to right until it snaps in locked position.

See **pages 88** to **93** for applications of cylinder bed feature.

NEEDLE AND THREAD SELECTION

The selection of thread should be based on the fabric to be stitched. The thread should blend with the fabric in colour, fibre and size.

Silk and wool fabrics should be stitched with silk thread; cotton fabrics should be stitched with cotton or cotton mercerised thread, etc. The thread must be of a size that will imbed itself into the texture of the fabric. Thread that is too heavy for the fabric will remain on the surface and become weakened by friction and abrasion.

The selection of the needle should be based on both the fabric and thread being used. The eye of the needle must be large enough for the thread to pass freely through it. The blade of the needle must be fine enough not to mar the fabric with too large a puncture, yet heavy enough to pierce the fabric without binding or deflecting.

You will obtain best stitching results from your Sewing Machine if it is fitted with a SINGER® Needle.

NEEDLES AND THREAD

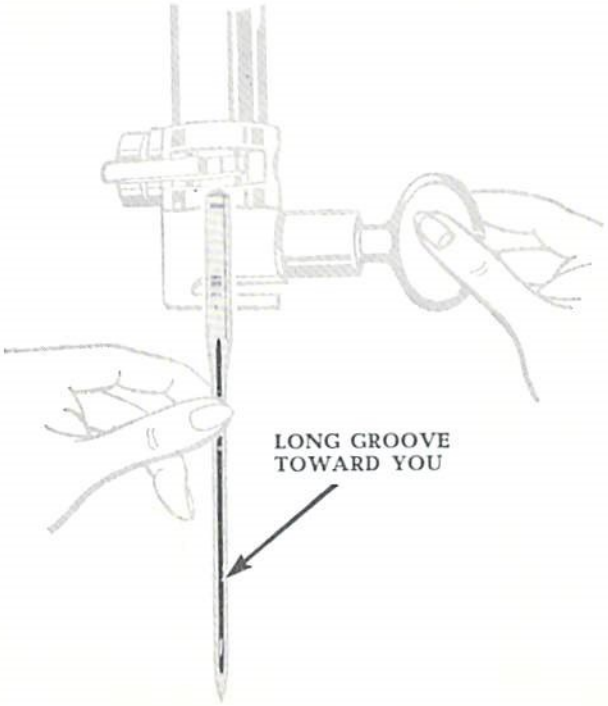
This machine uses needles
Catalogue 2020 (15×1).
Sizes 9, 11, 14, 16 and 18.

For perfect stitching, select correct needle and thread to correspond with fabric (see **page 6**).

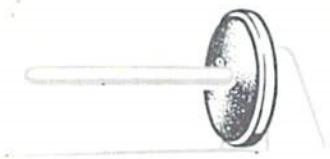
Be sure to use similar threads for both needle and bobbin.

NEEDLE INSERTION

Raise the needle bar to highest point by turning the hand wheel toward you. Loosen the needle clamp screw. Insert needle upward into clamp as far as it will go, with the flat side of the needle to the back and the **long groove toward you.** Tighten needle clamp screw.

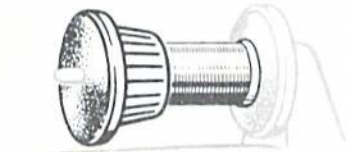


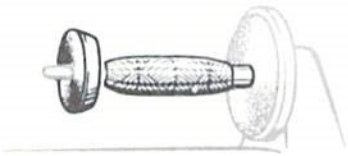
SPOOL HOLDER

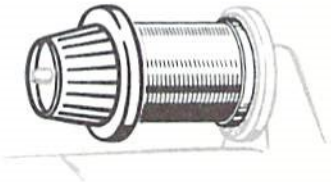


1. Slip spool seat on to spindle (Cushion side facing spool of thread).

2. Slip spool of thread on to spindle.



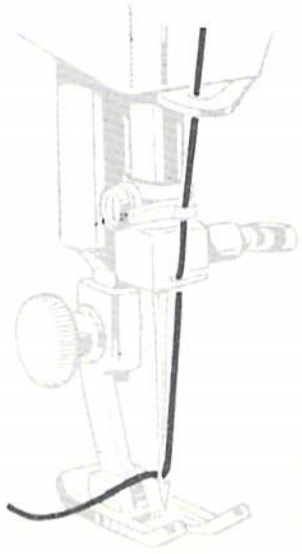




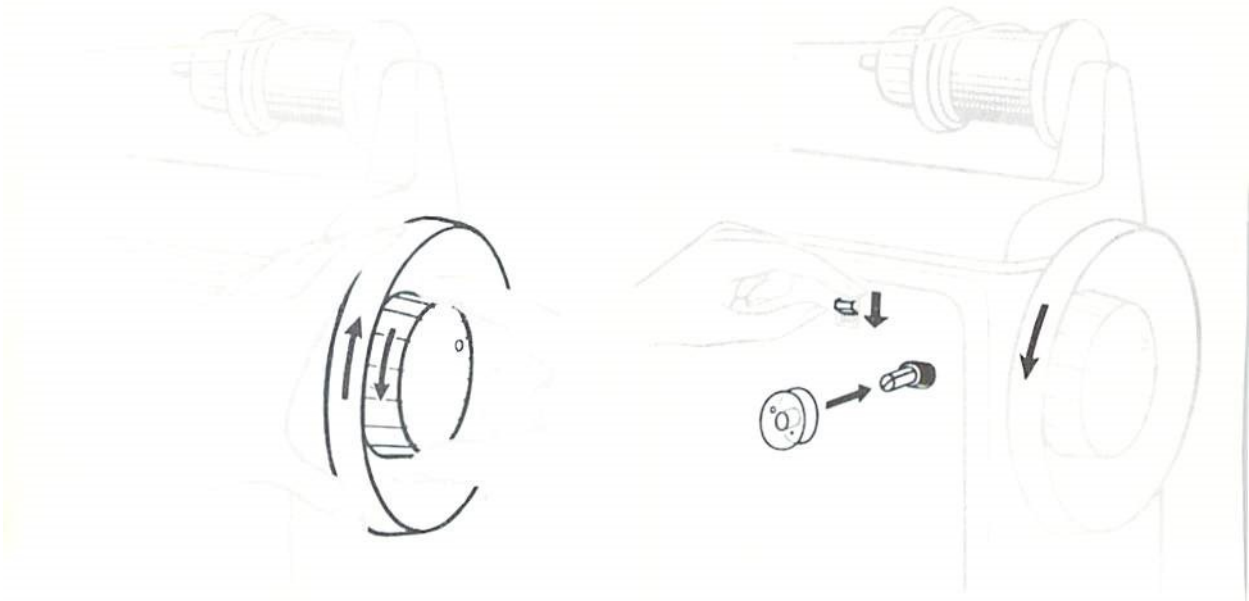
3. Press thread lead-off against spool of thread. Select thread lead-off according to the size of thread spool used, as shown.

UPPER THREADING-SINGLE NEEDLE

Raise take-up lever to highest point. Place thread on spool holder and lead through threading points shown. Thread needle from front to back. Draw sufficient thread through eye of needle with which to start sewing.

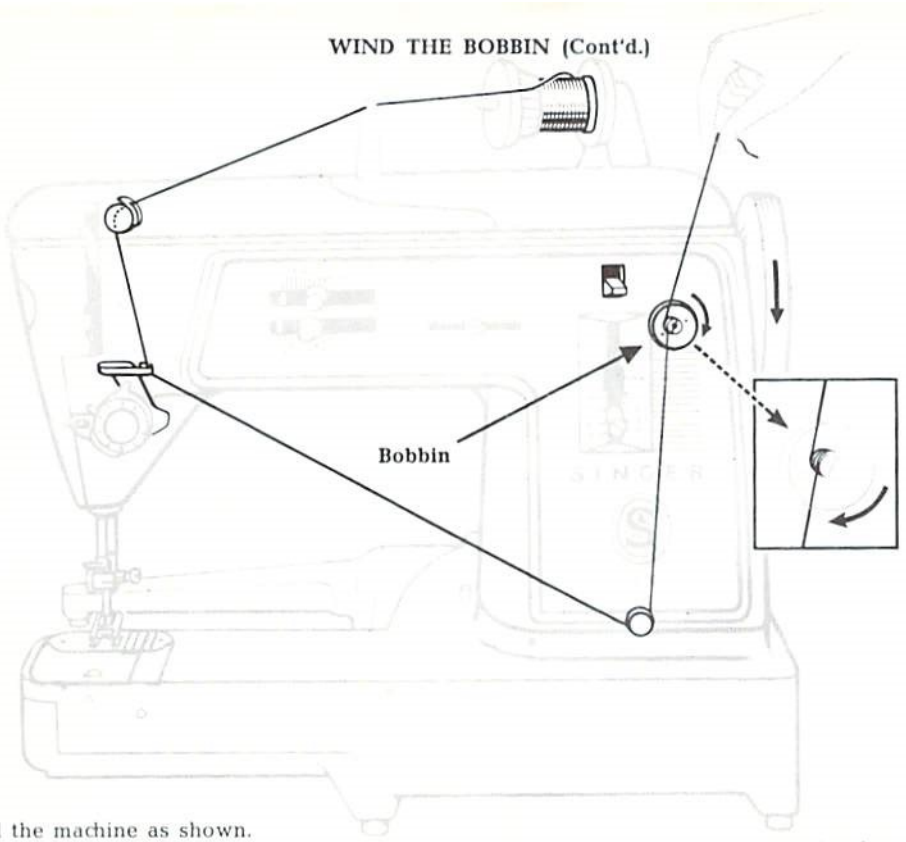


WIND THE BOBBIN



Release hand wheel, turn stop motion screw with right hand in direction shown by arrow. Slip bobbin on to bobbin winder spindle.

WIND THE BOBBIN (Cont'd.)



Thread the machine as shown.
Wind several coils of thread around the bobbin and depress bobbin winder engaging lever.

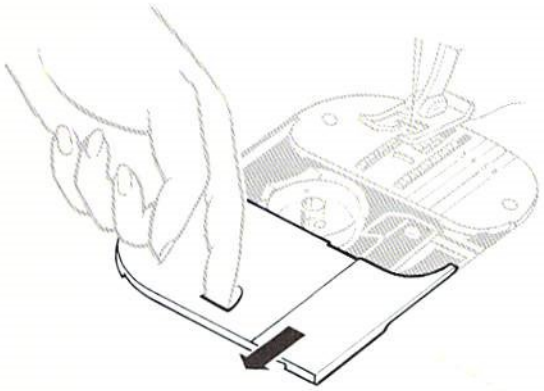
WIND THE BOBBIN (Cont'd.)

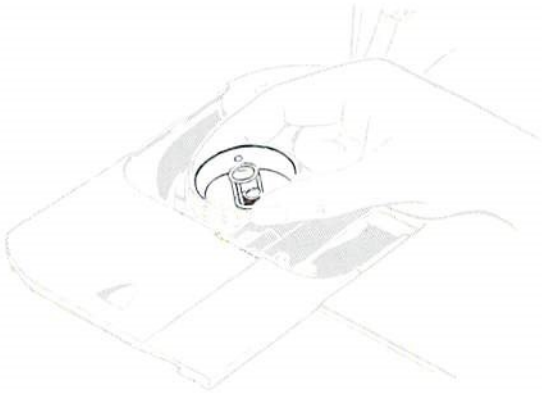
Do not wind too much thread, otherwise there would be no free run of the bobbin in the bobbin case.

Stop machine, raise bobbin winder engaging lever and remove bobbin from bobbin winder spindle.

Tighten stop motion screw with right hand in direction shown by arrow.

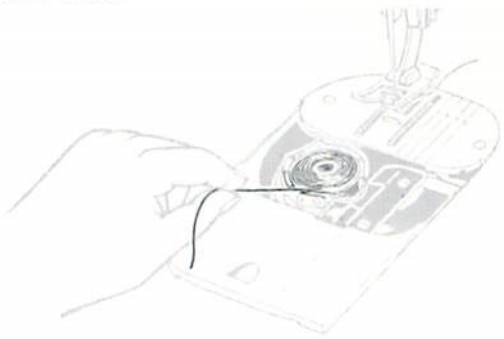
REMOVE THE BOBBIN



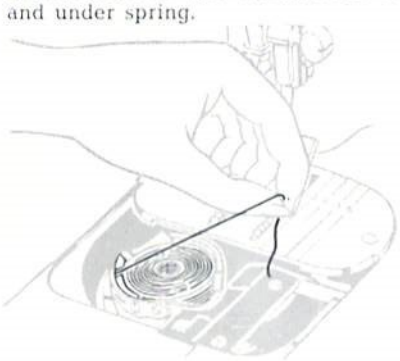


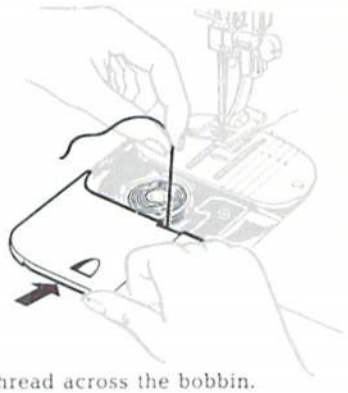
Open slide plate and remove bobbin.

THREADING THE BOBBIN CASE



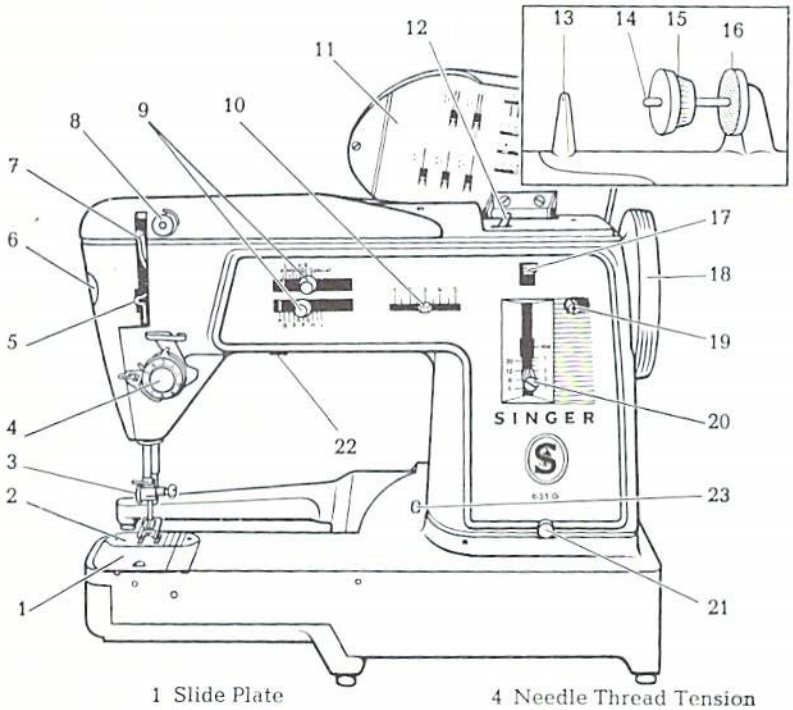
Hold bobbin so that thread leads off in direction shown. Place bobbin in case. Guide thread into slot and under spring.





Draw thread into notch at end of spring, pulling off about 3 inches of thread across the bobbin. Close slide plate allowing thread to enter notch.

PRINCIPAL PARTS OF MACHINE 631



1 Slide Plate
2 Throat Plate
3 Presser Foot Screw
4 Needle Thread Tension
5 Chain Stitch Thread Guide
6 Pressure Release Button
7 Thread Take-up Lever
8 Pre-tension
9 Pattern Selector Buttons
10 Stitch Width Lever
11 Stitch Chart
12 Light Switch
13 Thread Guide
14 Spool Spindle
15 Thread Lead-off
16 Spool Seat
17 Bobbin Winder Engaging Lever
18 Hand Wheel
19 Bobbin Winder Spindle
20 Stitch Length Regulator
21 Bobbin Winder Pre-tension
22 Bulb Replacement Lever

STITCH LENGTH INDICATOR

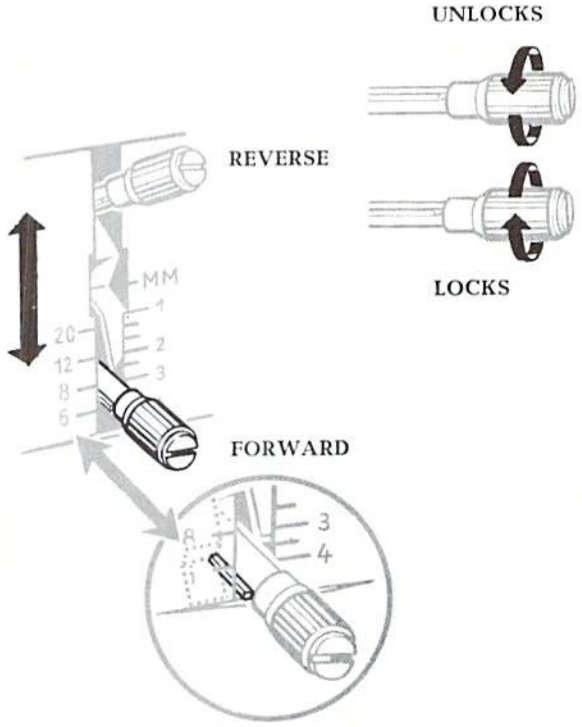
Numerals on the left side of the indicator represent the number of stitches per inch. Numerals on the right side represent stitch length in millimeters.

A superfine control can be made in case of stitch lengths less than 1 mm or stitches per inch (20).

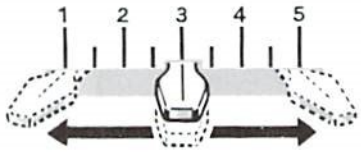
The greatest stitch length of 4 mm or 6 stitches per inch (6) can be locked in place when stitching folds, pleats or multiple layers of heavy fabric.

To set stitch length: Loosen by turning thumb nut to the left as shown. Position lever for desired stitch length. Tighten by turning thumb nut to the right.

By raising the stitch length regulator to the highest point, reverse stitching is accomplished at the same stitch length as forward. When in locked position, 4 mm or stitches per inch (6) cannot be reversed. If reverse stitching is desired with this stitch length position, turn thumb nut to the left until the stitch length regulator can be adjusted to its highest point at reverse stitching.



STITCH WIDTH AND NEEDLE POSITION SELECTOR



A Stitch width or needle position setting is necessary for both straight and zigzag stitching.

When used with a straight stitch setting, the lever places stitching in left, centre or right needle position (see **pages 26** and **27**).

When used with a decorative stitch setting, the lever controls width of primary patterns and produces variations of combination patterns (see **pages 41** and **43**).

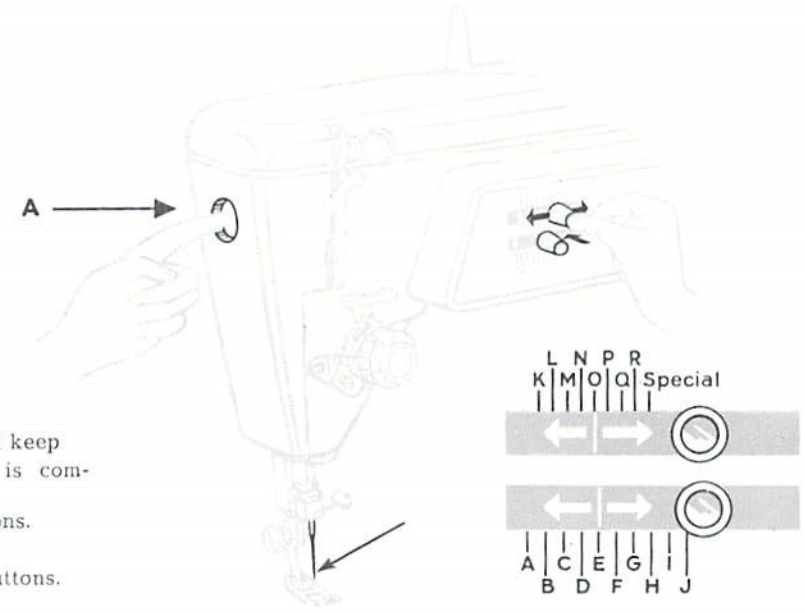
To position, depress lever and slide it left or right to desired setting. Numerals indicate five positions but intermediate settings may also be used.

PATTERN SELECTOR

Please note: Do not make selector adjustments while the needle is in the fabric.

When make Pattern selection set stitch width lever at 3.

PATTERN SELECTOR



To Select Required Pattern

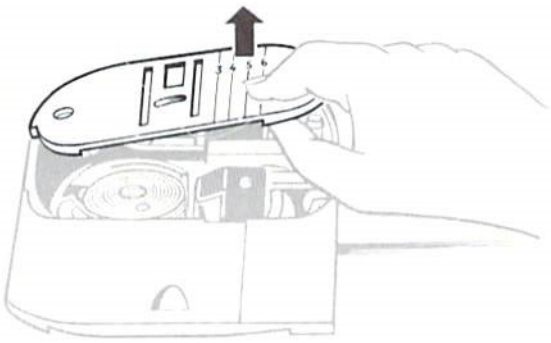
1. Depress Push Button **A** and keep depressed until selection is completed.
2. Push Pattern Selector Buttons.
3. Select required Pattern.
4. Release Pattern Selector Buttons.
5. Release Push Button **A.**

Settings from K through Special are made by the upper button.

Settings from A through J are made by the lower button.

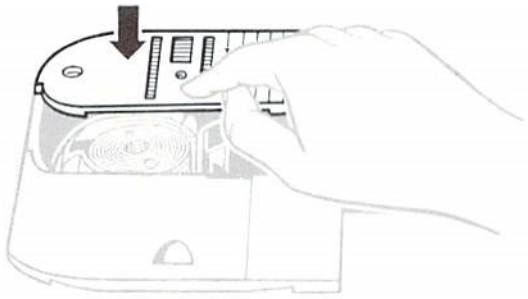
THROAT PLATE
REMOVAL AND REPLACEMENT

Removal of throat plate



Raise presser bar. Turn hand wheel to raise needle to its highest position. Open slide plate. Place thumb under front end of throat plate and lift plate from machine.

Replacement of throat plate



Place throat plate in position over two clamping pins and then close slide plate.

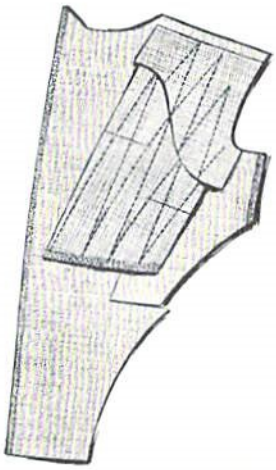
CHAIN STITCH

More than any other sewing machine the new SINGER 631 will eliminate a considerable amount of time-consuming and burdensome work previously done by hand. This machine has the unique feature of being capable of producing not only conventional lock stitching but selectively single thread chain stitching.

The main advantage of this type of stitch is that the single thread chain stitch can easily and quickly be removed by a single pull on the chain stitch seam. By means of the chain stitch the necessary tacking and basting operations indispensable for sewing perfectly fitted dresses or other garments can now be produced on a machine. Even a section of a chain stitch seam can be removed without any effort as is frequently required when fitting the dress or garment (side and waist seams). Once the dress or garment fits, the final lock stitch is stitched in a close parallel line to the chain stitch. Then the temporary seam is removed by a single pull without leaving remains of the thread in the fabric. Thus sewing-in of the basting seam is very unlikely. For basting, regular thread or darning thread may be used.

The single thread chain stitch has a wide range of applications and can be employed for a variety of operations, for instance:

- Edge basting on jackets, coats and costumes — sleeve inserting — attaching collars — hems on skirts, blouses etc.;
- Basting canvasses to the fronts of costumes and jackets instead of sewing them with zigzag stitches;
- Sewing shrinking tucks on garments as shirts, pyjamas etc. as well as on ready made clothes and curtains made from fabrics which are likely to shrink. The temporary stitching of the curtains and also the final stitching can be performed on the same machine. Stitching growth tucks which can be opened on clothes for growing children, as desired;
- Re-sewing waist and leg hems on ladies' and men's underwear of tricot or interlock fabrics when replacing elastics;



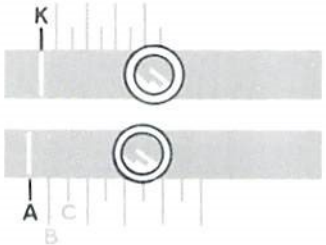
- Adjusting length and width of ladies' slips (shortening for short persons, taking-in width for slim persons) particularly to match fashions when dresses have a certain degree of transparency making a slip essential.

Another most distinctive feature of the chain stitch which will certainly be appreciated by the homeworker for artisan type production is that the chain stitch is formed **exclusively by the needle thread** thus freeing the operator from bobbin winding. This, in turn, is a time saving factor. In addition to the above mentioned applications the artisan worker will use the chain stitching for —

- First contour stitching on shirt collars — sewing on labels — hemming operations on neckties and umbrellas — in short, all operations where the chain stitch proves to be advantageous with respect to convenience, quality and time.

TO PREPARE THE MACHINE FOR CHAIN STITCH SEWING

Set Selectors at AK and stitch width lever at 3



First remove regular throat plate and bobbin.

Insert chain stitch loop retainer into bobbin case (Illustration 1)

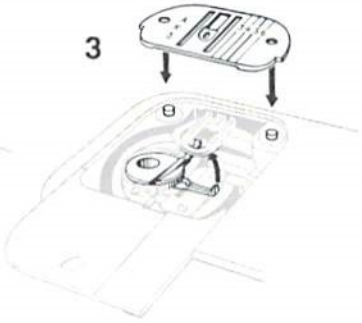
Tilt latch (Illustration 2) and turn to the left against stop (Illustration 3).

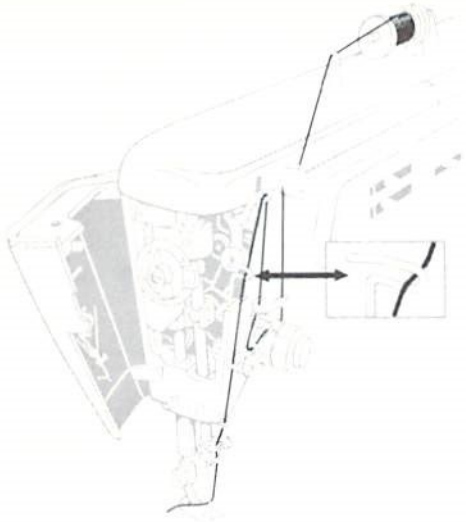
Insert chain stitch throat plate.

1

2

3





Threading: In addition to normal threading, place the needle thread in the chain stitch thread guide with the face plate open.

Stitch length: Normally set for maximum length, approx. 6 stitches to the inch (4 mm) (left row of numbers on the stitch indicator plate). Any stitch length between 6 and 12 stitches to the inch (2 mm) may be used.

Upper thread tension: Normally set between 1 and 2. Slight adjustment may be required dependent on the stitch length and the material used.

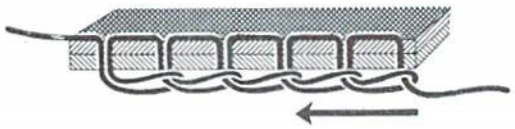
CHAIN STITCHING

A chain stitch seam has the same appearance as a lock stitch seam on the top side of the fabric. However, the knotting of the stitch does not occur in the material as on a properly balanced lock stitch seam; instead the thread forms loops on the underside of the fabric which resemble small arrowheads. These arrowheads peculiar to the chain stitch point towards the beginning of the seam.

When starting make sure that the take-up lever is in its highest position. This will prevent the needle thread from pulling out of the needle if the thread has been cut too short. Sew forward only! If the material is pivoted at the needle for operations where cornering is required, make certain that the needle is on its upward movement (approx. 1 cm above its lowest point) to avoid skipped stitches. Then continue to sew.

TO REMOVE THE MATERIAL FROM BENEATH THE PRESSER FOOT

The easiest way of removing the material is to sew off the edge of the fabric while slightly p lling on the material. This produces a chain which should be cut some distance away from the fabric. However, if the seam is ended before the edge of the fabric, bring the take-up lever to its highest position, then lift the presser foot and pull some thread through the take-up lever from the spool pin. Now draw the loose thread between the presser foot and the material to the right with the scissors and then cut the thread. By removing the material the free end of the thread is automatically pulled to the underside of the material and the seam is securely locked.



Direction of opening

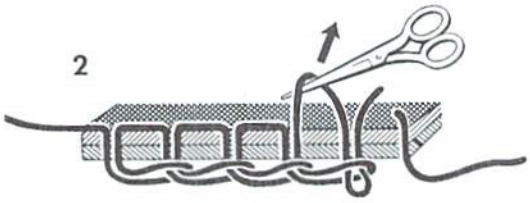
TO OPEN THE SEAM

The chain stitch seam can be opened in one direction only, from the end of the seam towards the start of the seam. The opening direction is distinguished by the arrowheads on the underside of the fabric which point towards the beginning of the seam.

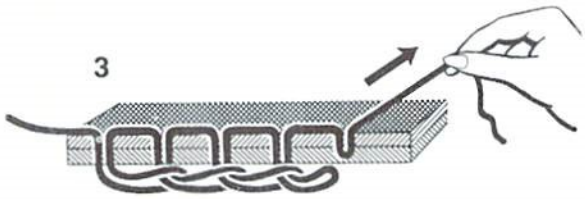
To open the seam, cut the last stitch on the top side of the fabric and then pull up the preceding stitch. With this free thread end the seam can be removed by a single pull. In the same manner the seam may be opened and removed at any desired place by pulling the thread end in arrowhead direction. The remaining section to the end of the seam will be maintained.

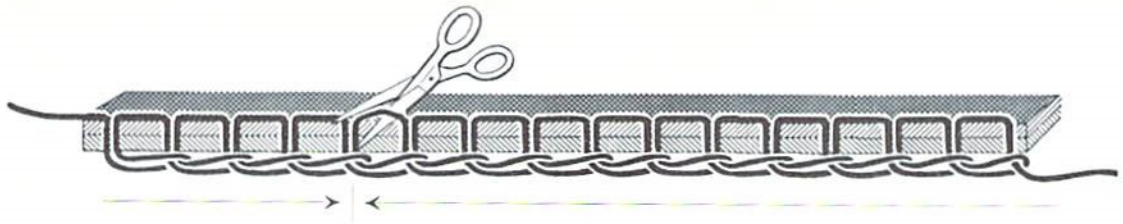
1

2



3

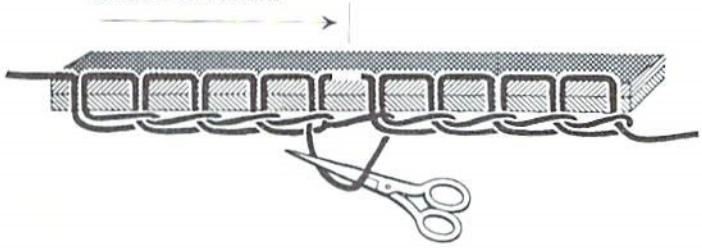




Section to remain

Section to be opened

Section to remain



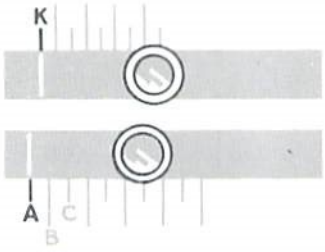
However, if the section towards the beginning of the seam is to remain and the segment towards the end of the seam is to be removed, either partly or completely, the remaining section must be locked first. For this purpose, cut the seam at the desired place on the top side and pull the loop out of the fabric on the underside of same. Then the desired segment of the seam can be removed as stated above.

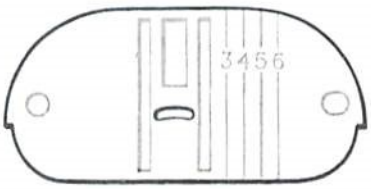
TO CHANGE FROM CHAIN STITCHING TO LOCK STITCHING

Changing to lock stitching requires only unthreading of the chain stitch thread guide (see **page 23**), replacing the bobbin and inserting the desired zigzag or straight stitch throat plate.

LOCK STITCH	

STRAIGHT STITCHING
A K 3





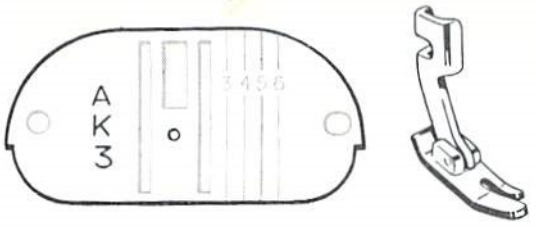
Set Selector at AK.
Stitch width lever at 3 — To locate stitching in central position.
General purpose throat plate and presser foot.

Use general purpose throat plate and presser foot for all utility sewing, long straight seams, etc., and where there is occasion to alternate between straight and zigzag stitching.

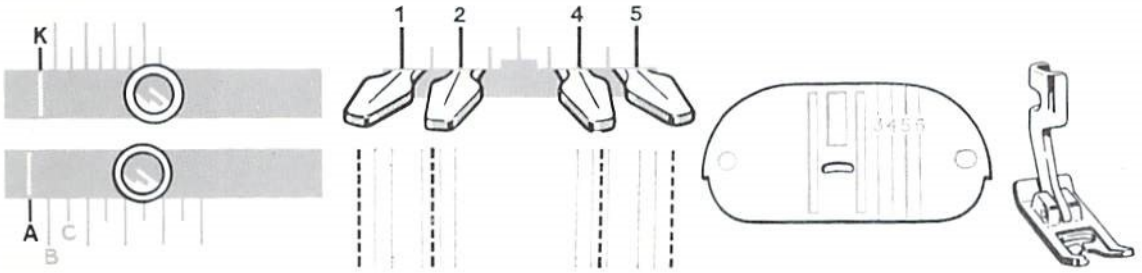
STRAIGHT STITCH THROAT PLATE AND PRESSER FOOT

Use the straight stitch throat plate and presser foot where fabric and sewing procedure require close control . . . for precision stitching of curved and scalloped edges, top stitching, edge stitching, etc.

For best results, this equipment should be used when stitching sheer and filmy fabrics, knits and tricots (particularly synthetics) and all soft spongy materials.



STRAIGHT STITCHING WITH LEFT AND RIGHT NEEDLE POSITION

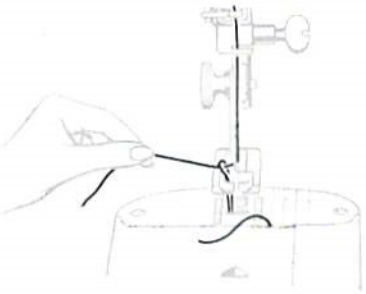


Set Selector at AK.
Stitch width lever at 1, 2, 4 or 5.
General purpose throat plate and presser foot.

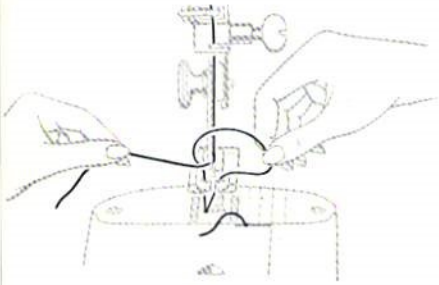
Do not make stitch width lever adjustments while the needle is in the fabric.

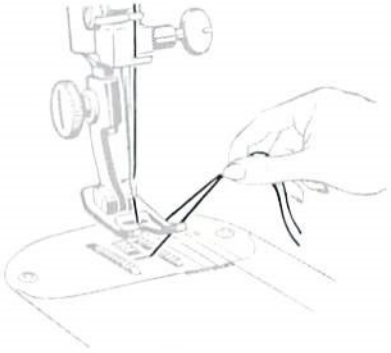
To meet special requirements a line of stitching may be placed to the right or left of centre.

Stitch width lever settings 1 and 2 locate stitching to the left. Settings 4 and 5 place it to the right. Intermediate settings may also be used.



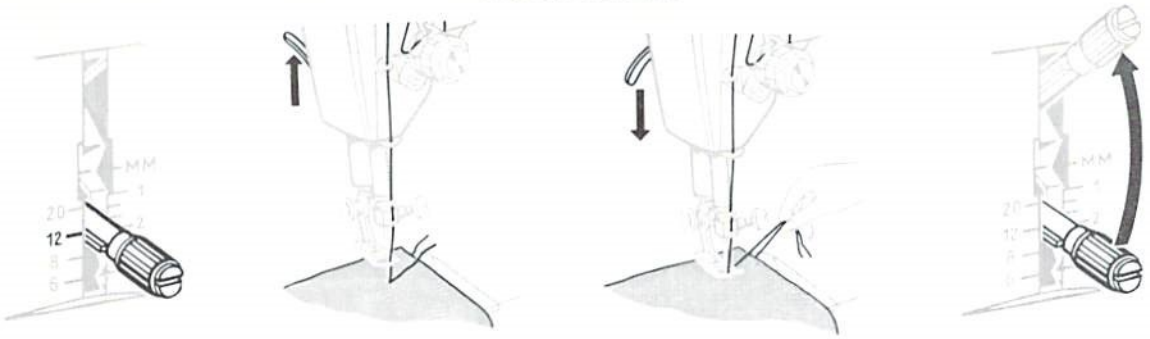
Hold needle thread lightly with left hand. Turn hand wheel so that needle enters plate and brings up bobbin thread.



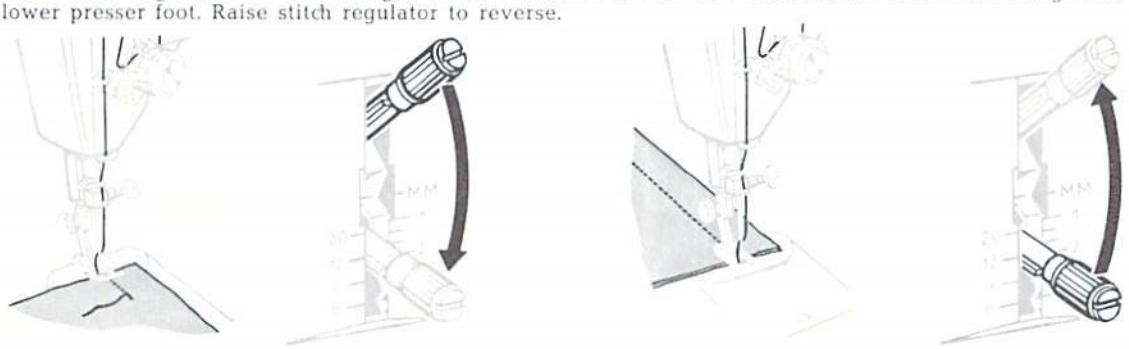


Pull end of bobbin thread through plate and place both needle and bobbin threads diagonally under presser foot.

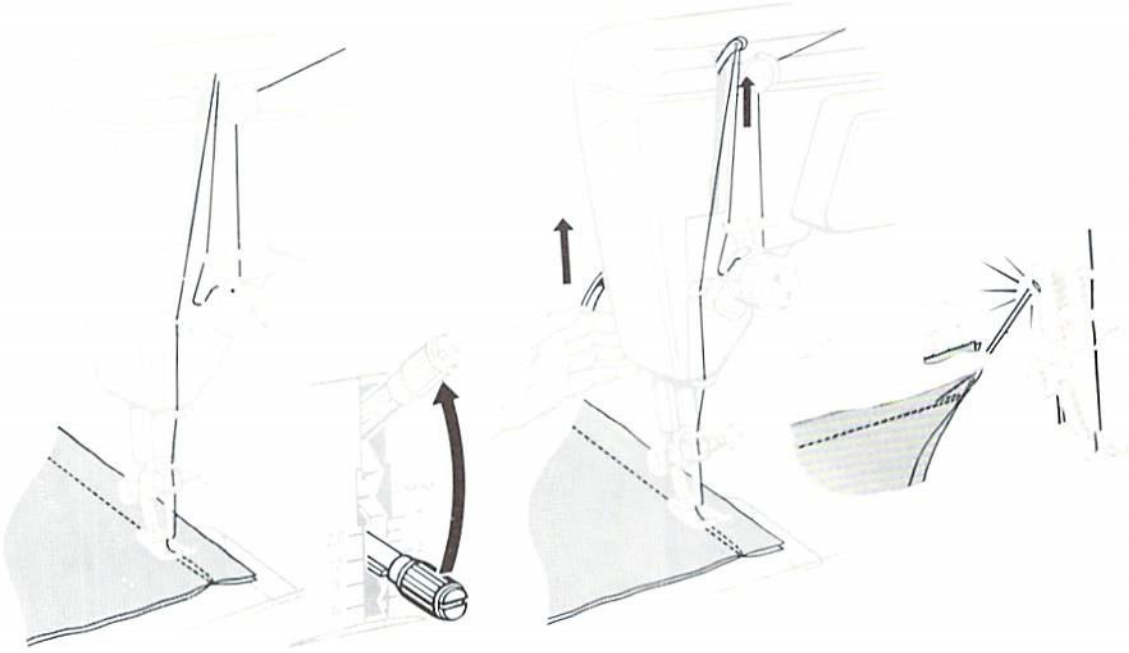
SEWING A SEAM



Set stitch regulator for stitch length desired. Position needle into fabric about ½ inch from edge and lower presser foot. Raise stitch regulator to reverse.



Back stitch to edge of fabric for reinforcement. Lower regulator for forward stitching of seam. Raise stitch regulator.



Back stitch to reinforce end of seam, and lower regulator to forward stitching position. With take-up lever at highest point, raise presser foot and remove fabric.

ERRATA
(Kl. 631 englisch)

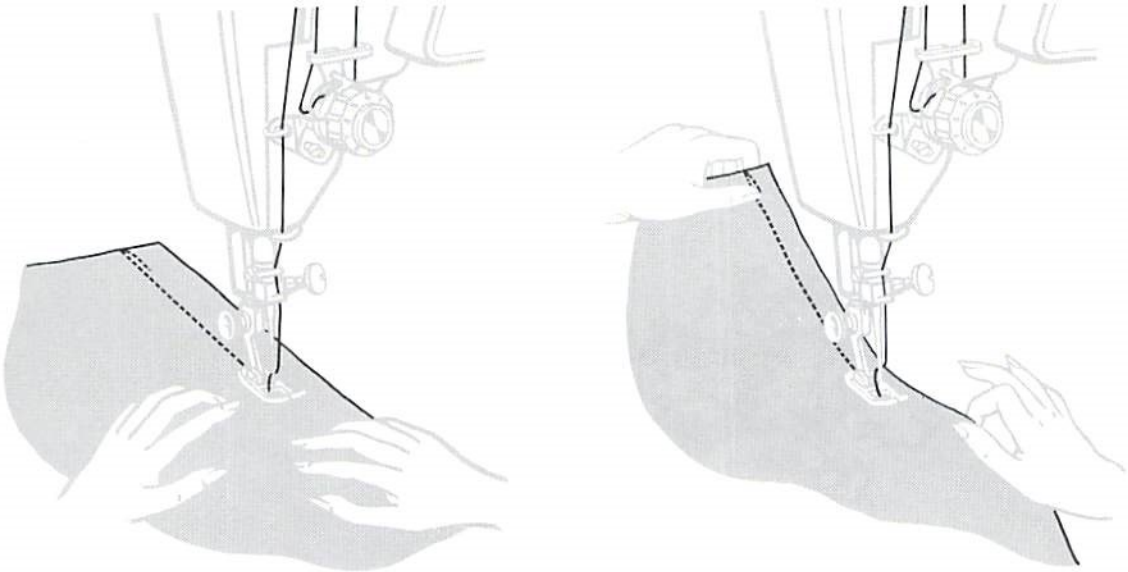
Page 15 Add "23 Cloth Plate Disengaging Button"

Page 50 Reverse the headings "Bar tacks and side stitching" and "Length of cutting space"

Page 102 (Index) Under "Darts" it should read "63—64" in place of "73—74"

Accordingly, under "Interfacing" it should read "64" and under "Single Thread" it should read "65".

GUIDING AND SUPPORTING FABRIC

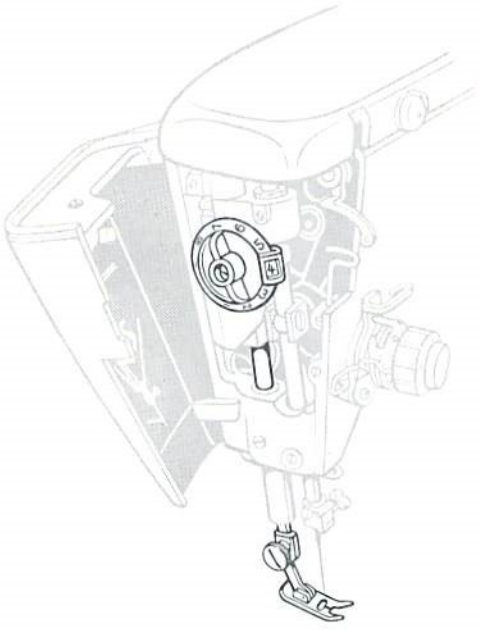


Most fabrics need only to be guided in front of the presser foot.

Fabrics of unusual texture and weave, filmy sheers, crepes, knits, tricots, etc., require support while being stitched.

For such fabrics, use the straight stitch throat plate and presser foot, and apply gentle tension to the seam by holding the fabric in front and in back of the presser foot as illustrated.

PRESSURE ADJUSTMENTS



Increase

Decrease

Position for darning and embroidery operations

Pressure is the force the presser foot exerts on fabric while it is being stitched.

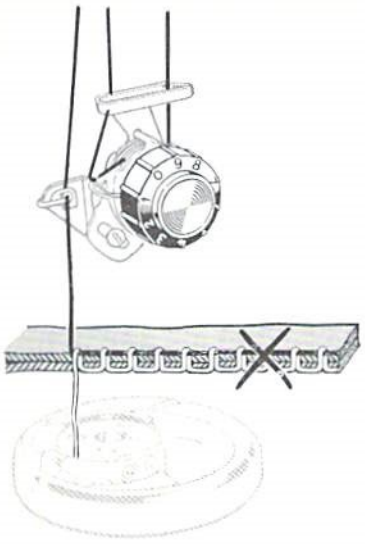
The presser foot must be lowered prior to adjustments. Smooth, even handling of several thicknesses of fabric results when pressure is correctly regulated. Heavy pressure is for thick fabric and light pressure is for thin fabric.

Too light a pressure will result in irregular feeding which affects both quality of stitch and evenness of seams.

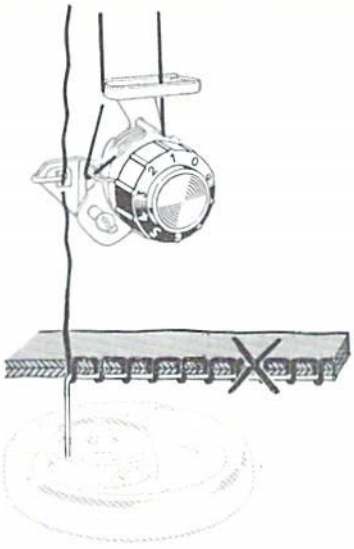
Too heavy a pressure not only affects stitch and seam quality but will also mar smooth surfaces and pile fabrics.

Surface finish, as well as the weight and texture of the fabric, must be considered in determining the amount of pressure needed.

NEEDLE THREAD TENSION
STRAIGHT STITCHING



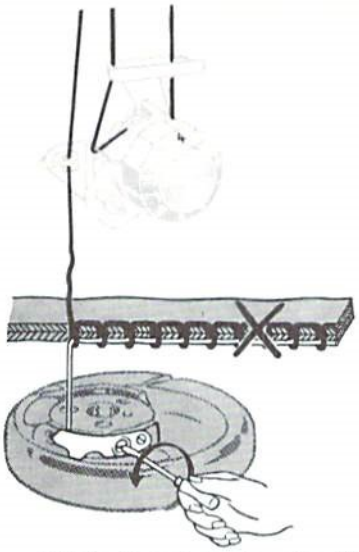
Needle thread tension too tight — correct by setting dial to lower number.



Needle thread tension too loose — correct by setting dial to higher number.

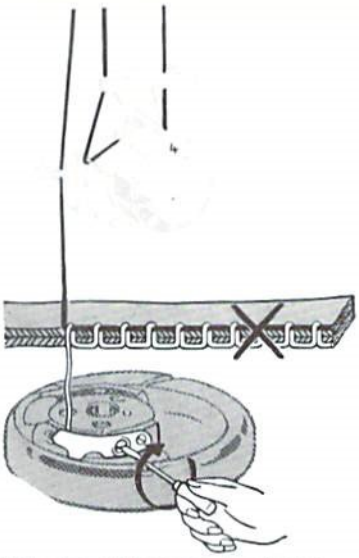
A perfectly locked stitch results with upper and lower tensions balanced so that needle and bobbin threads are drawn equally into fabric.

BOBBIN THREAD TENSION
STRAIGHT STITCHING



Bobbin thread tension too tight — correct by turning screw in direction indicated.

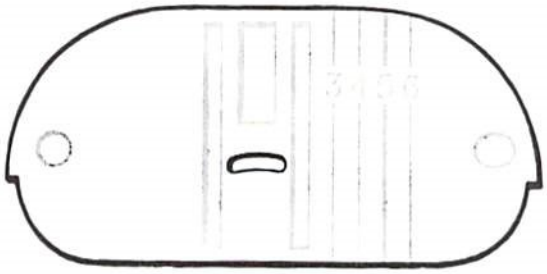
Insert for tension screwdriver



Bobbin thread tension too loose — correct by turning screw in direction indicated.

A perfectly locked stitch results with the upper and lower tensions balanced so that needle and bobbin threads are drawn equally into fabric.

ZIGZAG STITCHING EQUIPMENT

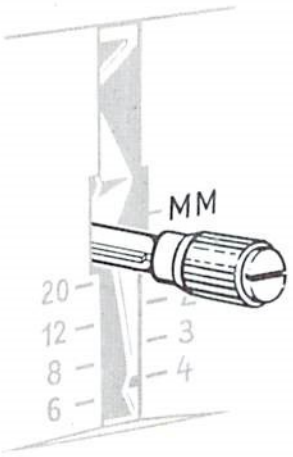


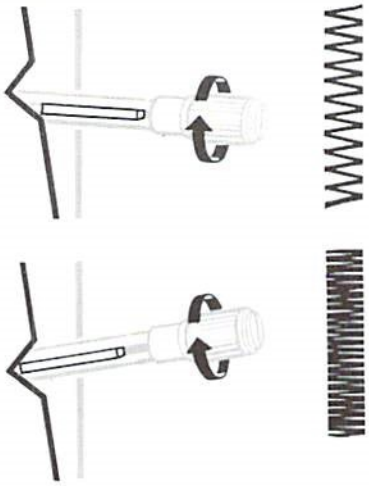
General purpose throat plate

General purpose presser foot.

Special purpose presser foot.

STITCH LENGTH ADJUSTMENT FOR SATIN STITCHING





The upper indented area behind the stitch indicator provides a means of gradually shortening the stitch length.

As the regulator knob is turned, the pointer rides deeper into this indentation until a closed satin stitch is obtained.

The exact stitch setting will vary with the texture of the fabric. It is advisable to make a test on a scrap of self fabric, using the Special Purpose Foot, before proceeding with actual work.

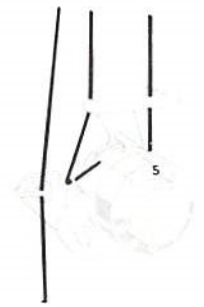
SATIN STITCH
TENSION ADJUSTMENT

Satin stitching requires a lighter needle thread tension than straight stitching or open designs. The wider the satin stitching the lighter the tension required.

Wide satin stitching, Stitch Width at **5**, requires the least amount of tension. For narrower satin stitching slightly more tension should be used.

To determine correct tension setting, a test sample should be made on self fabric using the Special Purpose Foot. A properly balanced satin stitch should lie flat across the material. Any tautness or puckering indicates too high a needle thread tension.

Some soft fabrics may require the addition of a backing to insure good stitching results. Crisp organdy and lawn are suitable for this purpose.

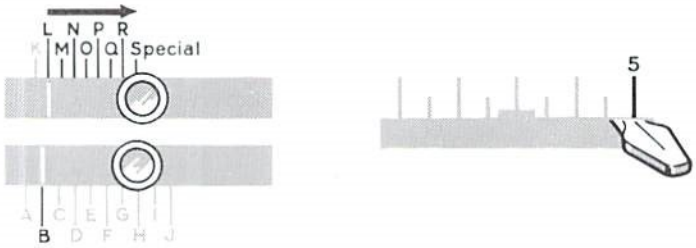


Tight needle thread tension

Correct needle thread tension

PRIMARY PATTERNS — BUILT-IN THE MACHINE

See **pages 17** and **18** for operation of stitch width lever and selector.

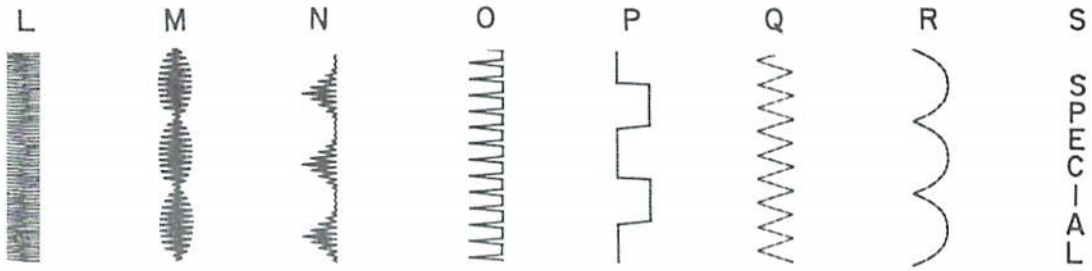


The operation of the upper selector button between L and Special controls the function of the primary patterns shown below.

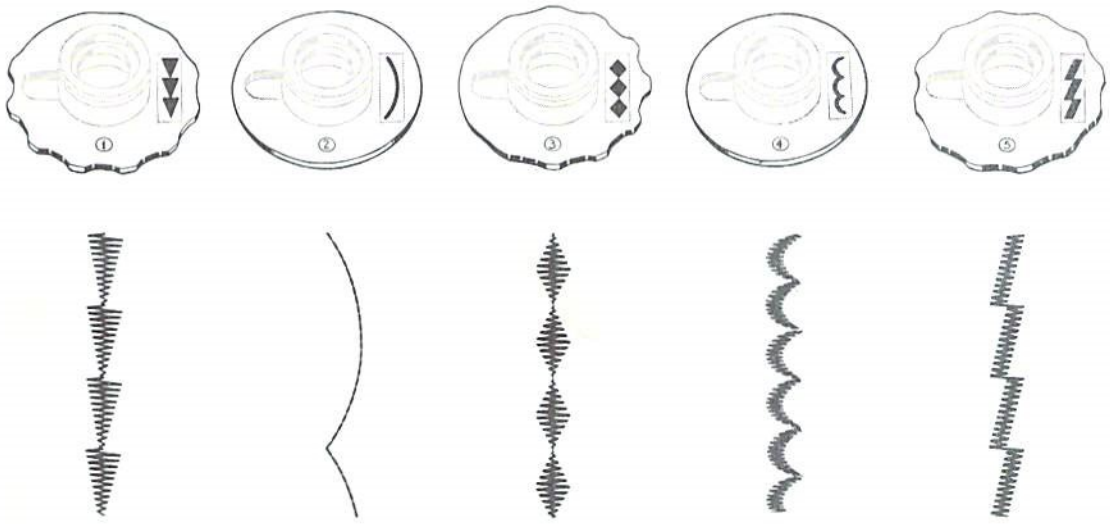
The setting of the lower selector button at B places the stitching in the central needle position.

The stitch width lever controls the width of primary patterns.

Do not make stitch width lever or selector settings while the needle is in the fabric.



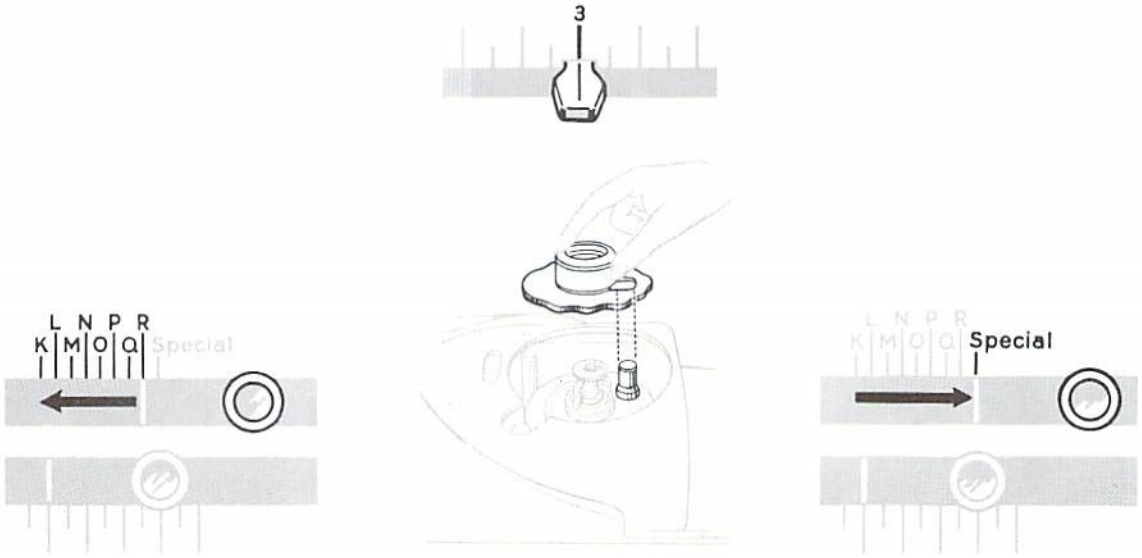
PRIMARY PATTERNS
SPECIAL DISCS



These five interchangeable Special Discs, classified as Primary Patterns, are included with the machine. Each produces an individual design.

Circled numbers (for example ②) in this book indicate Special Disc numbers.

PRIMARY PATTERNS
REPLACEMENT OF SPECIAL DISCS

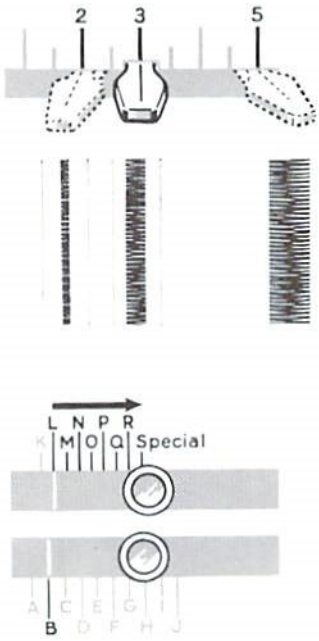


To replace any of these discs, move pointer of the upper Selector off Special.

Raise the stitch chart at top of the machine. Remove disc and place another disc onto spindle, pushing downward until disc snaps in place.

Set pointer of the upper Selector on Special to engage the disc.

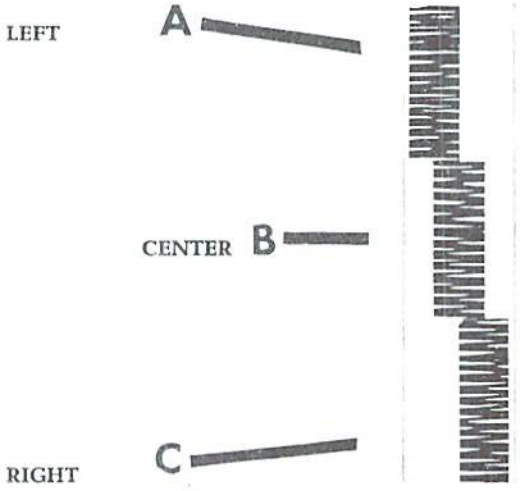
PRIMARY PATTERNS
STITCH WIDTH LEVER CONTROL OF WIDTH



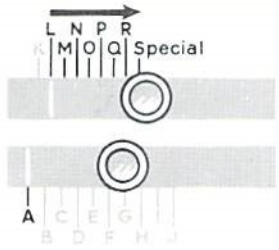
The width of Primary Patterns is controlled by the stitch width lever. Settings range from a maximum of 5 to a minimum of 2.

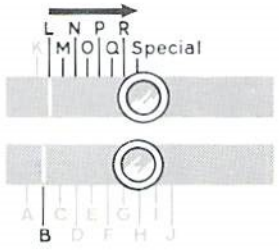
PRIMARY PATTERNS
NEEDLE POSITIONS

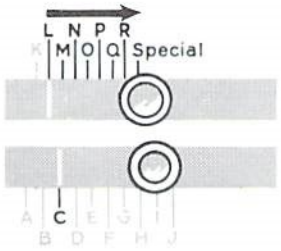
Selector setting of B places stitching in central needle position. Selector settings A and C place the stitching in left and right needle positions at widths less than 5.



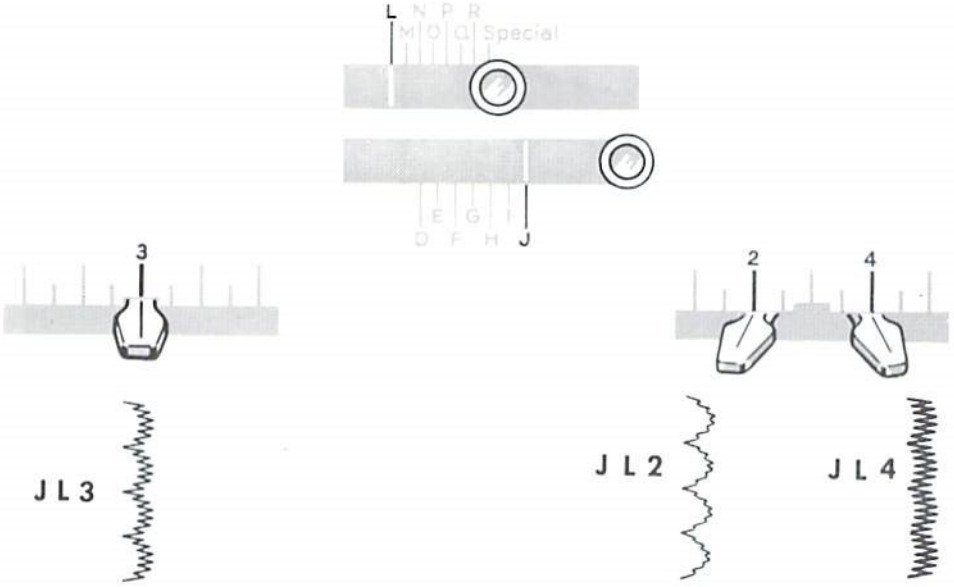
Selector setting B is preferred. Settings A and C are only used when special placement of stitching is desired. For example: Buttonholes, button sewing.







COMBINATION PATTERNS AND VARIATIONS

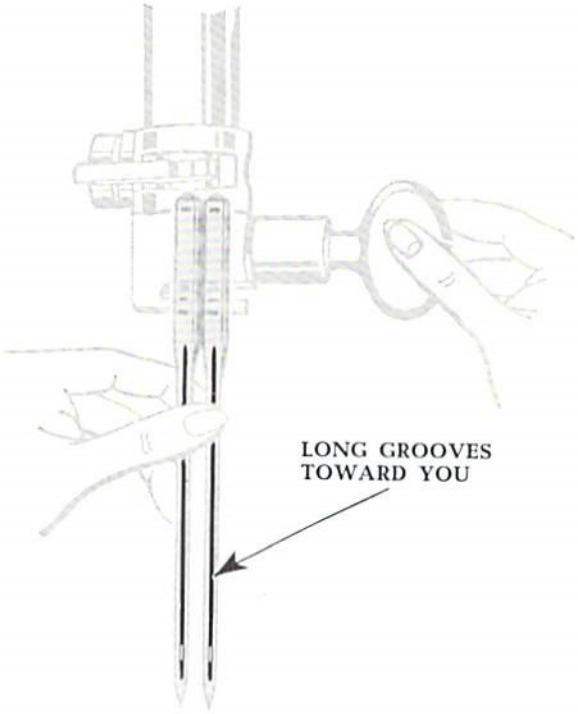


A great variety of additional stitch patterns can be created by combining any lower Selector setting from D through J with any upper Selector setting from L through Special.

A stitch width lever setting of 3 results in a Combination Pattern. Settings of 2 and 4 produce Variations.

TWO NEEDLES

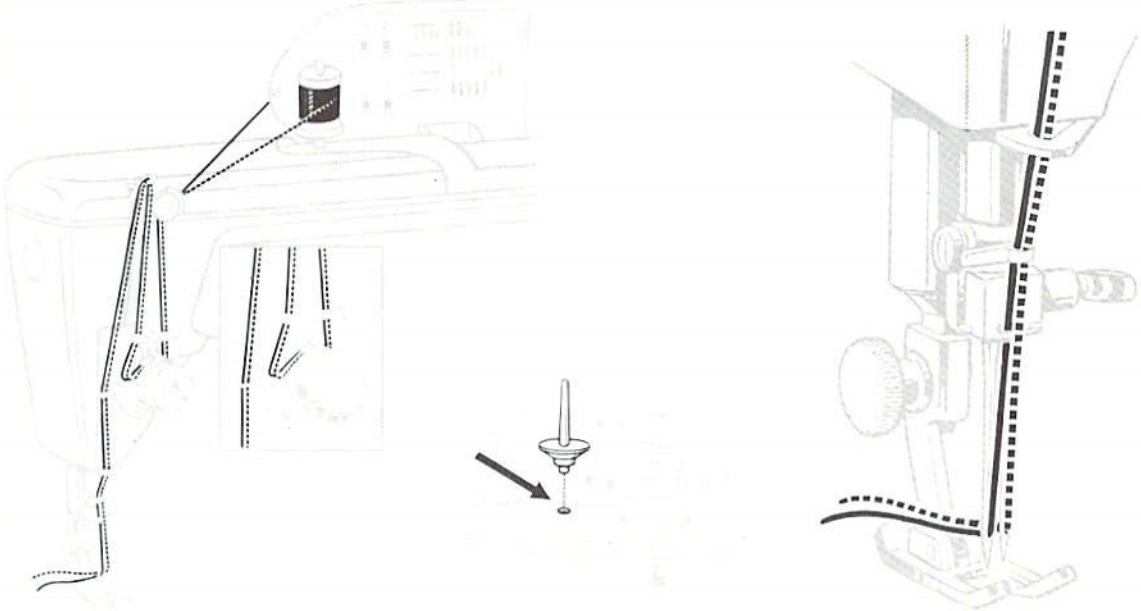
The needle clamp accommodates two Cat. 2020 (15×1) needles, generally of the same size. However, where special effects are desired, needles of different sizes may be used together, with corresponding threads. Loosen the thumb screw and insert the additional needle from the right. (See **page 7** for procedure.)



TWO NEEDLES

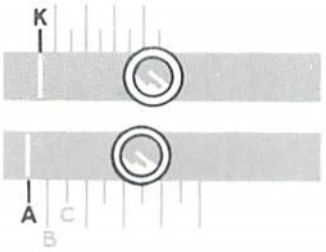
UPPER THREADING

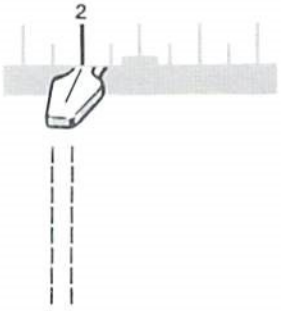
Thread as for single needle first (see **page 9**). Open top cover, insert auxiliary spool holder (which is furnished with the machine) into the hole provided (see illustration). Slip second spool of thread on to the auxiliary spool holder and thread second needle as shown.



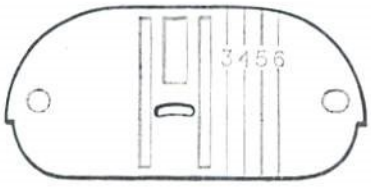
Make certain that threads are separated by the centre tension disc. Carry only one thread through the last guide at the needle clamp.

TWO NEEDLES
STRAIGHT STITCHING AK 2

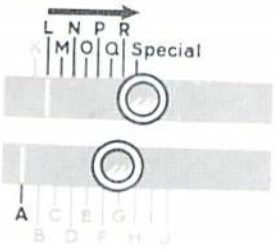


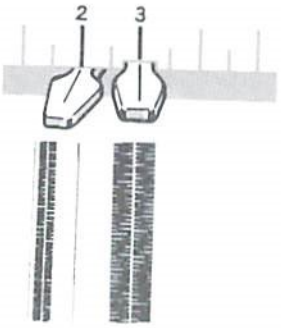


Selector setting: AK.
Stitch width lever: 2 only.
General purpose foot and throat plate.

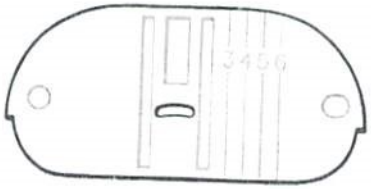


TWO NEEDLES
PRIMARY PATTERNS





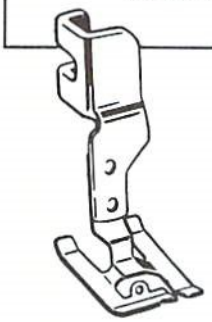
Selector setting: A — L through special
Stitch width lever: 2 or 3 maximum.
General purpose throat plate.
General purpose foot or special purpose foot



Instructions for using ATTACHMENTS...

NOTE: The attachments which are not regularly furnished with your machine are available for separate purchase at your local SINGER SEWING CENTRE.

SPECIAL PURPOSE FOOT



This light, flexible foot is designed for satin-stitching. It provides maximum visibility and maneuverability while allowing closely spaced zigzag stitches to feed freely.

It is ideal for accurate placement of satin stitching in buttonholes, monograms, motifs and applique work.

The eyelet on the left side of the foot accommodates a filler cord.

APPLICATIONS

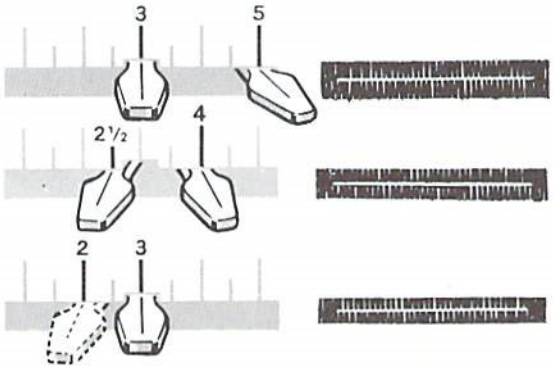
Buttonholes
Applique
Monograms
Decorative Stitching
Couching
Motifs

BUTTONHOLES

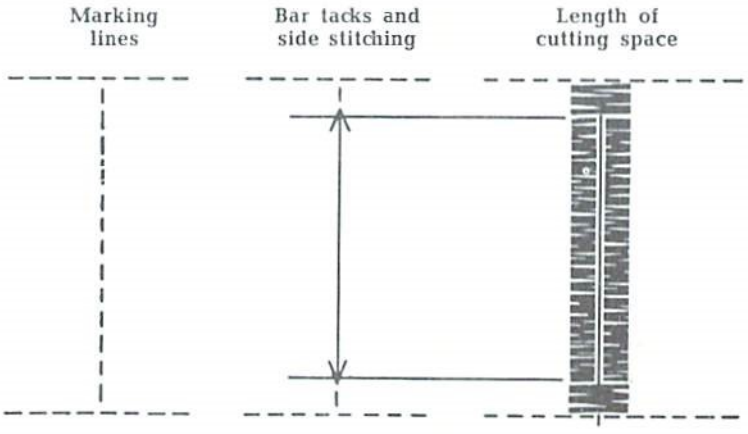
Selector: AL
Stitch width lever: See below
Throat plate: General purpose
Special purpose foot
Stitch length: Fine

To establish the correct stitch setting and length of buttonhole, a sample must first be made.

Three Stitch Width settings are available. Fabric weight and buttonhole size will determine the selection.



BUTTONHOLES

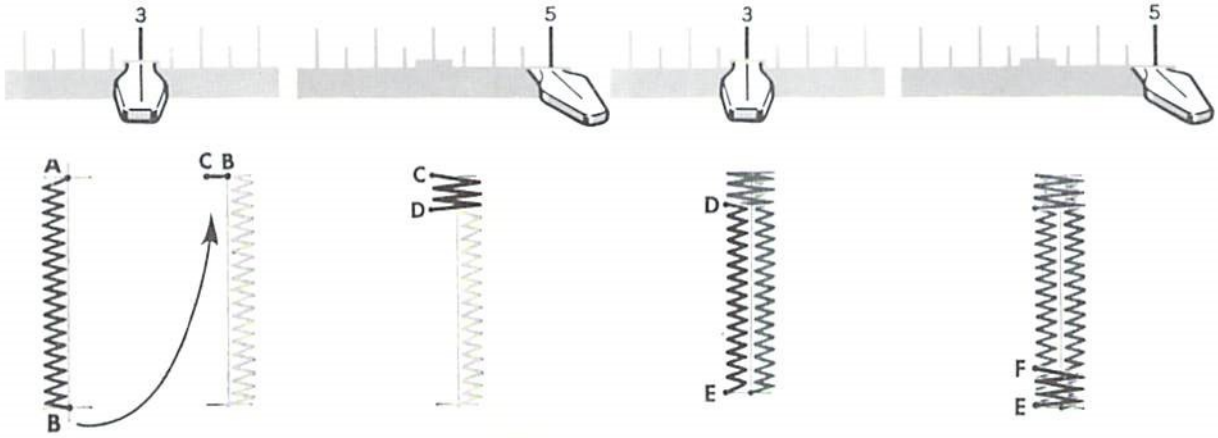


The length of cutting space, the opening through which the button passes, is measured by the width and thickness of the button.

The length of the finished buttonhole will be the cutting space plus 1/8 inch for bar tacks.

Work a sample buttonhole in the same fabric as the garment. Use a double fold, duplicating a facing, and include interfacing if this has been used.

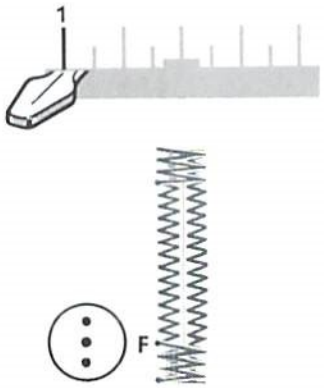
BUTTONHOLES



Stitching Procedure. Set Selector and stitch width lever. Place work under the needle, aligning the center marking of buttonhole with center score line of foot.

To form side stitching, turn hand wheel toward you so the needle enters fabric at point **A**. Lower foot and stitch to end of marking. Leave needle in fabric at point **B**. Raise foot, pivot work on needle. Lower foot. Take one stitch without changing stitch width lever setting, bringing work to point **C**. Adjust to stitch width lever setting for bar tacks and take no less than six stitches. Stop at point **D**. Readjust to stitch width lever setting for side stitching. Complete to point **E**. Move to stitch width lever setting for bar tacks and duplicate tack previously made, ending at point **F**.

BUTTONHOLES

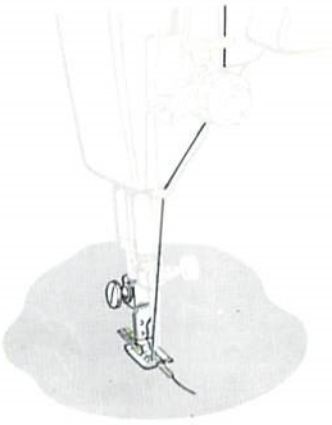


To secure stitching move stitch width lever to No. 1 setting and take three stitches. Remove work, draw threads to the underside, fasten and trim.

With sharp embroidery scissors cut opening for button.

Raised or Corded Buttonholes. Both No. 8 pearl cotton and buttonhole twist make suitable filler cords for raised buttonholes.

Place the spool of filler cord on the second spool pin. Carry the cord through the first thread guide, straight down between the center and back tension discs, into the large thread guide and then through the eyelet on the Special Purpose Foot. Draw the cord under and in back of the foot and proceed as for regular buttonholes.



APPLIQUE

Applique adds beauty and interest to wearing apparel, linens and fabric furnishings.

Either contrasting or self fabric may be used effectively. The most versatile stitch in appliqueing is a closely set zigzag stitch (Primary Pattern BL). The width of this stitch may be varied to accommodate weaves and textures of fabrics. Combination Patterns and Variations present many interesting ways to applique with decorative stitching.

Preparation. There are two methods by which applique work may be done. The appropriate method is determined by the fabric being used, and a test sample is advisable.

Position the design properly and baste it to the fabric. Attach the Special Purpose Foot to the presser bar.

Method No. 1. Set Selector and lever for the desired stitch pattern. Following the shape of the design, outline it entirely with applique stitching. Any excess fabric on the outer edges is trimmed away after the stitching has been completed.

Method No. 2. Set Selector and Lever to **AK 3** for straight stitching. Outline the entire design with a short stitch. Trim the raw edges down to the stitching.

Set Selector and Lever to the stitch pattern desired, and overedge the design with this stitching. A smooth, lustrous finish results, which requires no additional trimming.

Corded Applique. The Special Purpose Foot, which provides for a filler cord, is perfect for corded applique work. Gimp, crochet thread or buttonhole twist are generally used.

See **page 52** for threading.

Either method of appliqueing may be used when cording is desired. The only change in procedure is the introduction of the cord, over which the applique stitching is formed.

This stitching technique results in a raised, dimensional effect, and is an ideal finish for lace applique.

MONOGRAMS AND MOTIFS

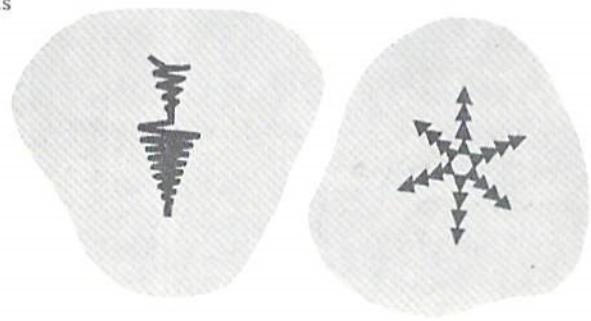
Any of the many stitch patterns are perfect for monograms and motifs.

Select a design from the many transfer patterns available or sketch one to suit your purpose.

Some fabrics may require a backing of lawn or organdy.

Position the design on the right side of the material. Trim backing away when stitching is completed, if necessary.

To reproduce a specific portion of a stitch pattern, first stitch on a scrap of material until the desired point in the design is reached.



Remove the material from under the presser foot. Now position motif or monogram under the needle. Lower presser foot and stitch.

This procedure is recommended for all precise design placement. Leaves, and flower petals, for example are created in this way.

SEAMING SHEERS

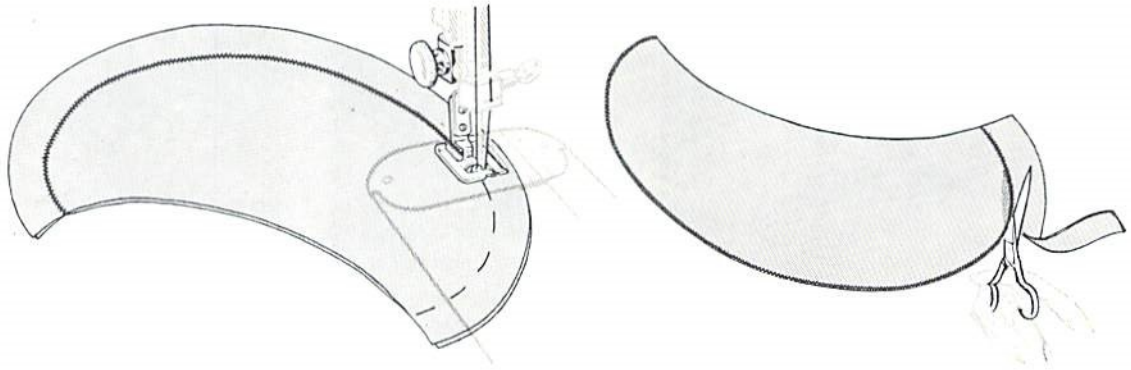
Selector: BL
Stitch Width: 2
Throat plate: General Purpose
Special purpose foot
Stitch length: Fine (above 20)

A dainty hair-line finish is particularly desirable for the inside seams of sheer collars, facings and yokes. Seam allowances that ordinarily show through are eliminated.

Both heavy duty thread and tatting thread mak suitable filler cords (see **page 52** for threading).

Follow the seam outline covering the cord. Cut away seam allowance close to line of stitching.

Turn and press.

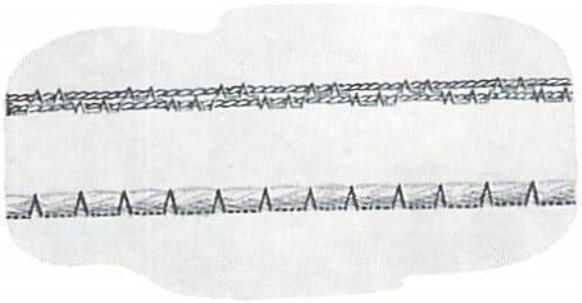


COUCHING

Novel effects are obtained by couching gimp, yarn or braid with stitch patterns.

Spaced patterns are the most appropriate as they allow the decorative cords to show as part of the design.

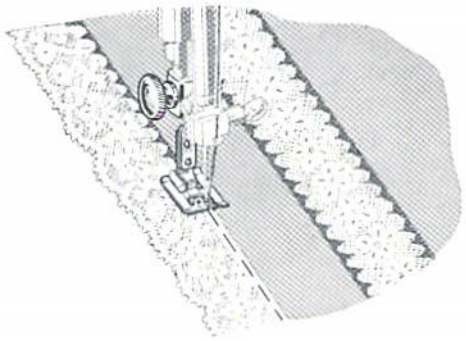
The Special Purpose Foot is ideally suited to this work (see **page 52** for threading).



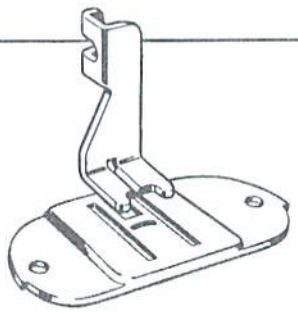
LACE EDGING AND INSERTION

Delicate, yet durable zigzag stitching is especially appropriate for the application of lace edgings and insertions.

Many decorative stitch patterns can be used effectively serving as both finish and trim.



BUTTON SEWING FOOT



This short, open foot accommodates any size sew-through button, and holds it securely for stitching. The groove in the foot allows for insertion of a machine needle, over which a thread shank may be formed.

The foot is used in connection with the General Purpose Feed Cover Plate.

Selector setting: AL
Stitch width lever: 1 and 4
Feed Cover Plate
Button sewing foot
Stitch length: above 20

Space between holes in button determines stitch width lever settings. Numbers **1** and **4** generally apply to standard buttons. Number **1** setting is constant, but **4** can be increased or decreased to accommodate buttons with unusual spacing.

Set Selector at **AL** and stitch width lever at **1.** Attach feed cover plate to machine in place of regular throat plate in same manner as instructed on **page 19.**

Position button under foot so that needle will enter into left hole. Lower foot. Turn hand wheel toward you until needle rises out of fabric and is just above foot.

BUTTON SEWING FOOT

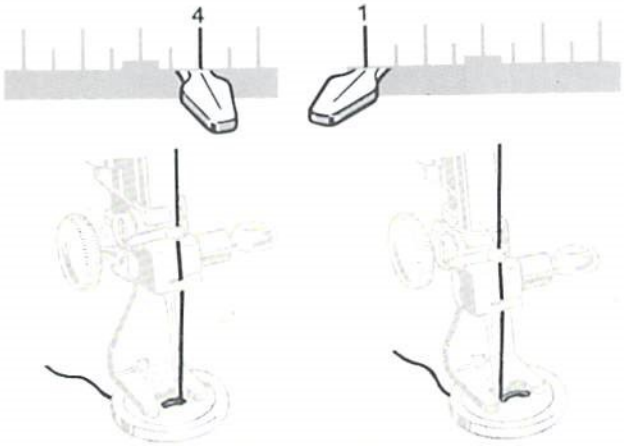
Set Lever at 4. The needle should then enter into the right hole of the button. Take approximately six zigzag stitches in this position. End at the left side.

To fasten stitching, adjust to number 1 Stitch Width setting and take approximately three stitches.

THREAD SHANK

In order to form a shank, stitching is done over a regular machine needle. Position button and lower button foot. Place needle in the groove of the foot so the point enters the hole.

A larger shank results when the heavy end of the needle is utilized.



GENERAL PURPOSE FOOT

Used with the general purpose throat plate this foot provides a wide needle slot which accommodates all stitch settings and can be used for most sewing operations.

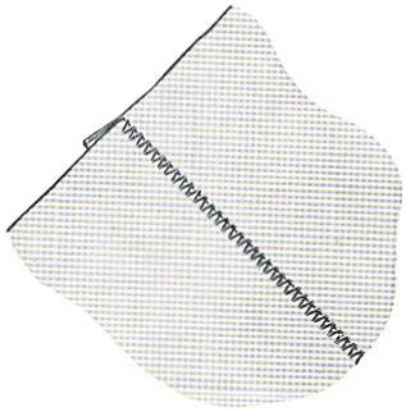
APPLICATIONS

Seams and Darts
Mending and Maintenance
Automatic Scalloping
Seam Finishes

SEAMS

LINGERIE SEAMS

Dainty lingerie seams are made durable and ripproof with zigzag stitching (BL 2½). After straight stitching the fitted seam on the wrong side, press both seam allowances in the same direction. From the right side, top stitch with a fine zigzag setting, letting the needle enter the seam line and then the seam thickness. Particularly good where flat bias seams are desired.



FLAT FELLED SEAMS

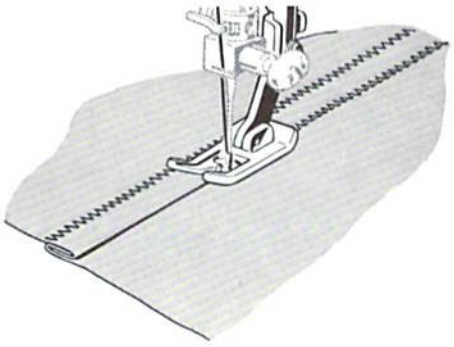
Zigzag stitching gives strength and durability to flat felled seams.

Form the seam to the right side of the fabric, taking full seam allowance, using a zigzag stitch (BL 3).

Press the seam open, then fold and press the two edges together, keeping the right side of the zigzag stitch uppermost.

Trim away half the under seam edge.

Fold the upper seam edge evenly over the trimmed seam, and top stitch.

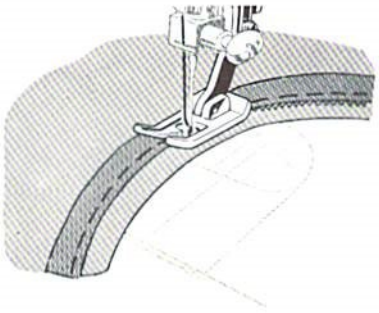


KNIT FABRIC SEAMS

A fine zigzag stitch (BL 1½) is ideal for seaming knit fabrics. Particularly desirable for underarm seams and other seams where elasticity and give are needed.

For neckline and waistline seams, where a stay is needed to prevent undue stretching, this same stitch can be used to apply seam tape. To insure a flat, smooth finish, position the seam tape with the edge exactly on the seam line. If seam is curved, pre-shape tape to fit by steaming, and baste in place.

Stitch, allowing the needle alternately to enter the seam tape and seam line.



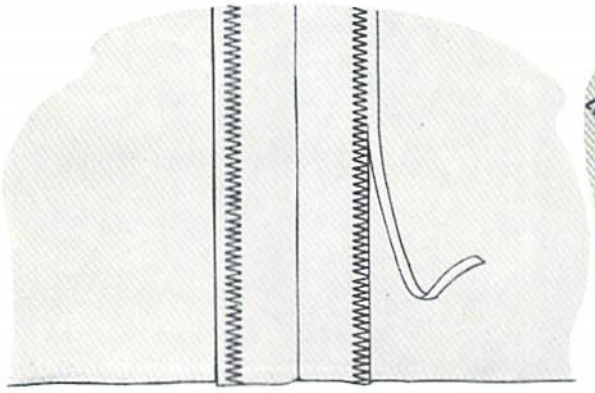
SEAM FINISHES

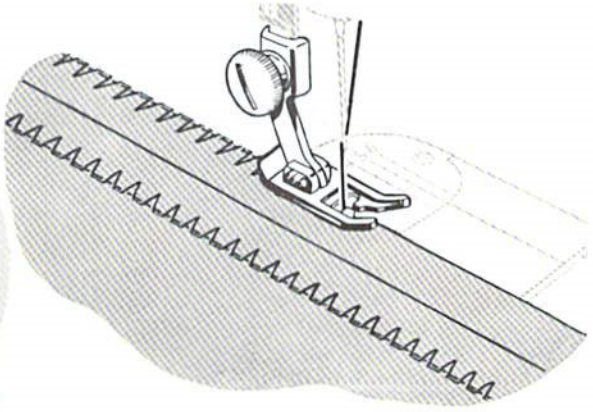
Seam edges support the garment and should be given a durable finish where fabrics have a tendency to fray.

The zigzag stitch BL is ideal for such finishing. Place the stitching near the edge of the seam allowance, and then trim away excess fabric.

For an overedged seam, the blind stitch BO makes a durable bulkless finish. Good for straight grain, lengthwise seams.

Seam edges should be trimmed evenly, and the stitch then formed over the raw edge.





DARTS

Darts provide fit and contour in a garment and should be accurately stitched.

A straight stitch dart (AK 3) is usually formed by stitching from the seam edge, tapering gradually to the point, where the last 3 or 4 stitches parallel the fold. Stitch beyond the fabric to form a thread chain ½ to ¾ inch in length. Tie the thread ends into a single knot close to the stitching.

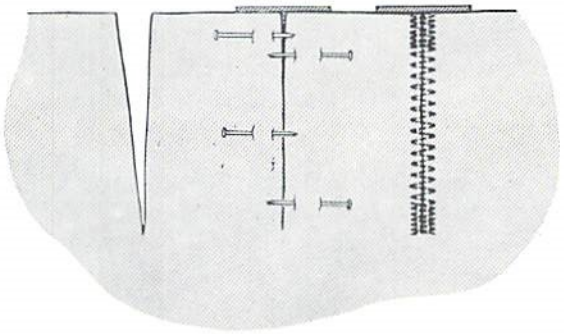
SINGLE THREAD DARTS

Darts add styling and interest when stitched with the fold to the outside of garment. Thread ends at the point of the dart are eliminated when the single thread principle is employed.

Unthread the needle. Use the thread leading off the bobbin and rethread the needle from back to front. Tie bobbin and upper threads together. Draw bobbin thread up through, threading points, winding enough on the spool to complete a single dart. Lower the needle into the very edge of the fold at the point of the dart. Take any slack out of the thread by turning the spool. Lower the presser foot and stitch carefully toward the seam edge.

This method is also ideal for inside darts in sheer fabrics as thread ends are eliminated at the point of the dart.

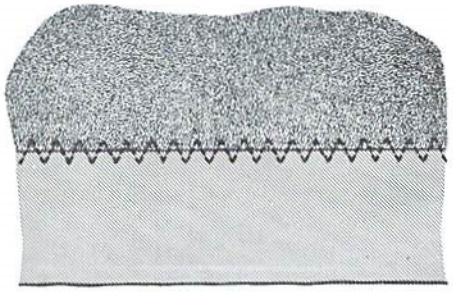
DARTS IN INTERFACING



Non-woven interfacings can be shaped without bulk with zigzag stitching. Selector setting BL or BQ may be used.

Cut out the dart allowance on the stitching line and bring the raw edges together. Pin, over a muslin stay, and stitch. Back stitch at both ends.

BLANKET BINDING

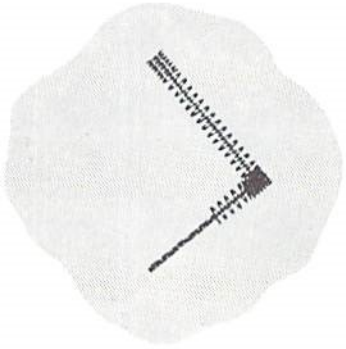


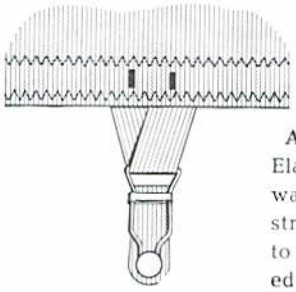
The multiple stitch zigzag (BQ) is an excellent stitch for applying blanket bindings and affords both a decorative and durable finish. Remove worn binding. Baste new binding securely in place and stitch. Adjust pressure if necessary, to accommodate the thickness of the blanket.

MENDING

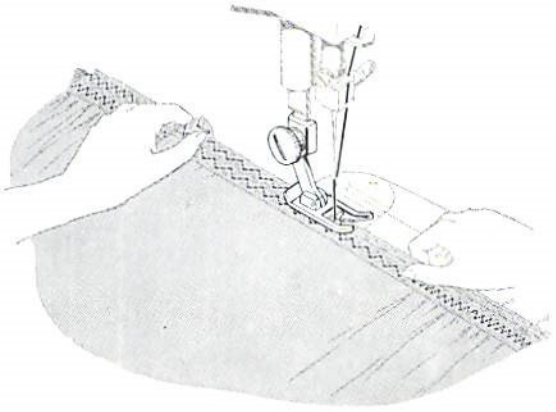
Zigzag stitching is well suited for all types of household mending. Selector setting BQ provides a firm, flexible bond for the repair of rents and tears, and is ideal for the reinforcement and application of elastic. Stitch length and width are regulated according to need.

Rent or Tear. Trim away ragged edges. Place an underlay to the wrong side of the tear for reinforcement. Using the multiple stitch zigzag (BQ) follow the line of the tear bringing the edges together. Shorten the stitch length at ends and corners to give extra strength.





Application of Elastic. Elastic, such as used in waist bands, must be stretched as it is applied, to insure fullness required in the garment.



SCALLOPING

Dainty scalloped edges are used extensively as self trimming on blouses, dresses, lingerie and children's wear.

Perfectly formed and evenly spaced scallops are produced automatically at Selector Settings BR and BS ②.

BR results in a 12-stitch scallop.

BS ②, a 24-stitch scallop.

Stitch regulator and lever settings vary the length and depth of the scallop.

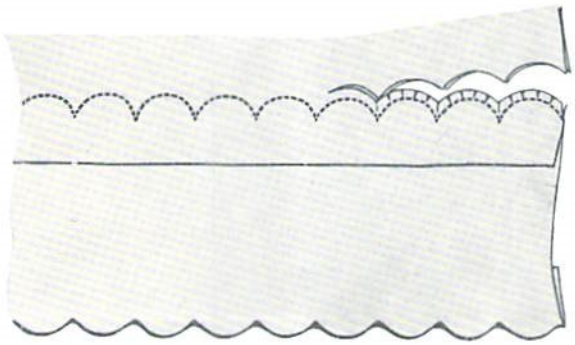
After stitching, trim seam allowance to less than 1/8" and clip into the points between scallops.

Some fabrics may also need notching, for a smooth, evenly turned edge.

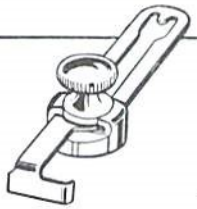
Turn, gently roll out scallops between the fingers and press.

When scalloping a shaped or bias edge it is best to use an interfacing.

When forming scalloped tucks, add an extra 1/4" to tuck allowance for seaming.



THE SEAM GUIDE



The seam guide aids in attaining uniformity of seam width. It provides for stitching to be spaced at any distance between 1/8" to 1 1/4" from the edge of the fabric.

APPLICATIONS

Seams — Blind Stitching
Top Stitching — Decorative Stitching

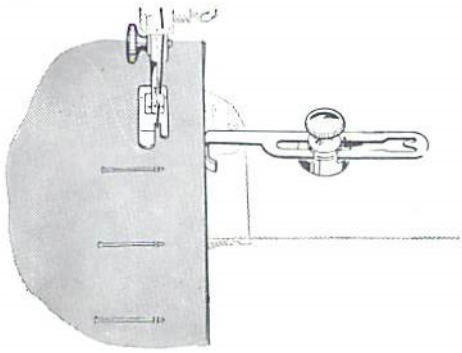
The attachment is used in connection with a presser foot.

It is secured to the bed of the machine in either of the threaded holes to the right of the needle.

SEAMS

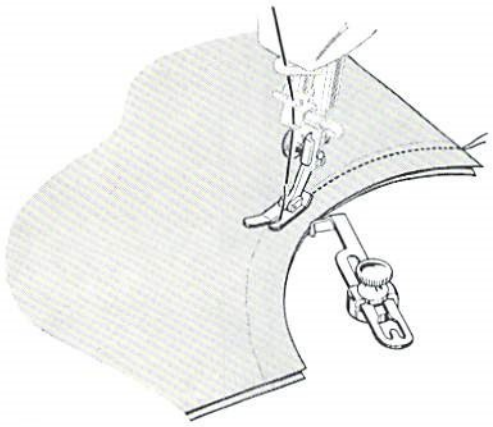
To guide seam stitching straight and parallel to the edge of the fabric, adjust the attachment for proper seam width. Align the guide with the presser foot. (Set Selector at AK, lever at 3.)

Pin seam edges and baste if necessary. Hand basting can be eliminated on easy-to-handle fabrics. Place pins with the points toward the seam edge so they nip into the fabric at the stitching line. The hinged presser foot will ride freely over the points. Guide the fabric edges lightly against the guide while stitching.



SEAMS (Cont'd.)

Curved seams require additional treatment in handling. A shorter stitch will provide greater elasticity and strength. Set the attachment at an angle so that the end closest to the needle acts as a guide.

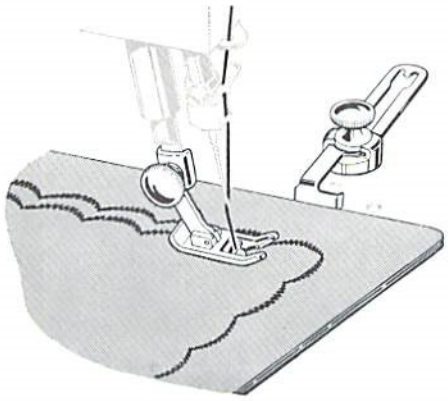


TOP STITCHING

A simple and practical way to accent the lines of a garment and at the same time give additional firmness.

Either single or multiple rows of stitching can be expertly placed along lapels and facing edges, around collars and pockets and as a hem finish.

A subtle effect may be achieved by using straight stitching, or a decorative touch may be added by using any of the attractive stitch patterns accomplished with this machine.



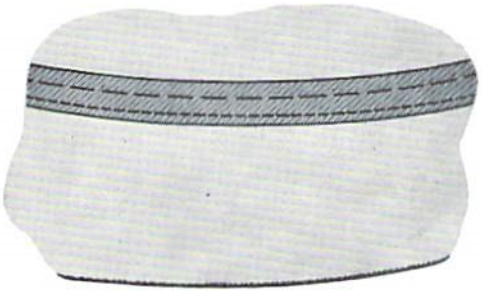
BLIND STITCHED HEMS

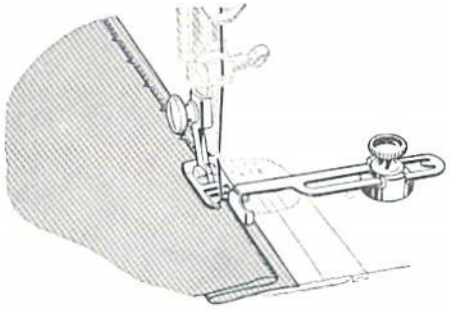
Selector: BO
Stitch width lever: 2—5
Stitch length: 10—20
Presser foot: General purpose
Throat plate: General purpose
Seam guide

Blind stitching provides a durable hem finish that is almost invisible, and comparable to hand sewing. It is equally suited to straight as well as circular hems. Taped, bound, turned or unfinished hem edges can all be blind stitched with equal ease.

Mark, turn and press the hem in the usual way. Place a basting guide line approximately ¼" from top hem edge.

Set Selector at BO. This setting produces four straight stitches, separated by a single sideward stitch to the left.





Stitch width lever setting for width of stitch is determined by the weight and texture of the fabric used.

Place the hem edge over the feed of the machine, turn back the bulk of the fabric to the line of basting, creating a soft fold.

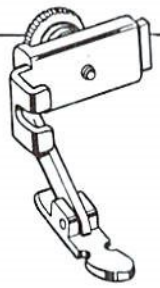
Position the work so that the straight stitches are made on the hem edge and the sideward stitches pierce the fold.

The stitch length will regulate the distance between the blind stitches (10 to 20 stitches per inch).

Adjust the seam guide over the right toe of the foot until it rests next to the soft fold. While stitching, feed the fold against the flat of the guide.

A test sample in self fabric should be made to determine correct settings.

THE CORDING FOOT



This foot is designed to facilitate the placing of stitching close to a raised edge. The hinged feature of this foot ensures even feeding over pins, heavy layers of fabric or cross seams. It is attached to the machine in place of the regular presser foot, and may be adjusted to either the right or left side of the needle. Straight stitch or zigzag settings may be used.

APPLICATIONS

Zip Fastener Insertions	Tubular Cording
Corded Seams	Slip Cover Piping

Preparation. Secure the cording foot to the presser bar as you would the regular presser foot. Set Selector and Lever. Adjustment to the right or left of the needle is made by loosening the thumb screw at the back. Check the position of the foot by lowering the needle into the side notch, making sure it clears the foot. Lock it into position by tightening the thumb screw.

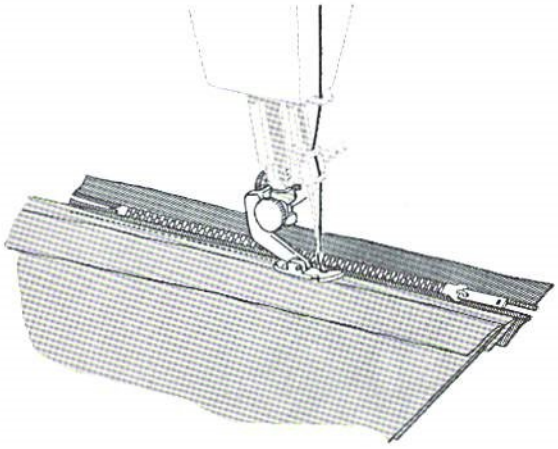
ZIP FASTENER INSERTION

Straight stitch setting: AK 3
Throat plate: General purpose
Cording foot

Many different types of zips are available for everything you sew. There are several satisfactory methods for insertion. Detailed sewing instructions are included in zip packet. For any method used, the Cording Foot enables you to form an even line of stitching close to the zip.

When the zip is to the right of the needle —
- Adjust the Cording Foot to the left of the needle.

When the zip is to the left of the needle —
- Adjust the Cording Foot to the right of the needle.



BLIND STITCHED ZIP FASTENER INSERTION

Selector setting: BO
Stitch Width: 2½ or 3
Throat plate: General purpose
Stitch length: 12
Cording foot

Blind stitching the final step of a zip insertion results in a fine finish that is almost invisible and comparable to hand sewing. Particularly suitable for chiffons, sheers, velvets and all delicate fabrics where top stitching would be too harsh.

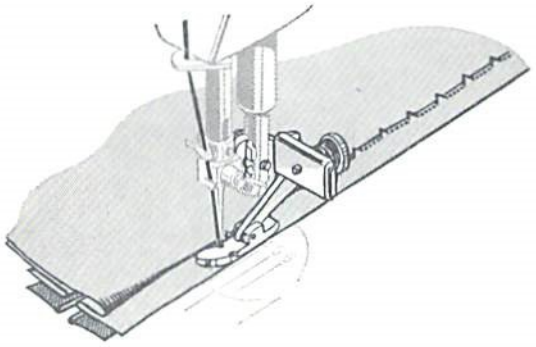
Allow a ⅞" seam allowance. Start the insertion in the regular way but omit final step.

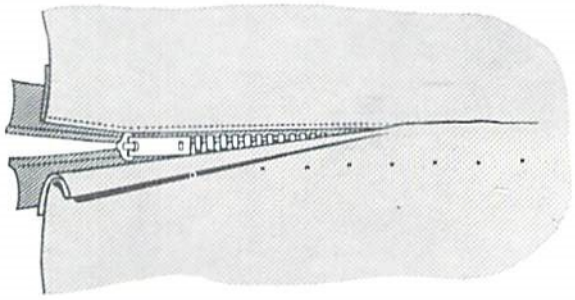
Work from the right side of the garment and pin the front of the zip tape into position.

Roll the work over finger to ease fabric and pin through all thicknesses. Baste about ⅜" from seam line to provide guide for blind stitching. Remove pins.

Set stitch and adjust cording foot to the right side of the needle.

Turn garment inside out. Place zip tape over feed of machine and turn back the front section of garment to line of basting, creating a soft fold. Position work so that the straight line of stitching is made through front seam allowance and zip tape, and the sideways stitch pierces a few threads of the fold. Lower presser bar and stitch slowly. Remove bastings. Press.





CORDED PIPING

Straight stitch setting: AK 3

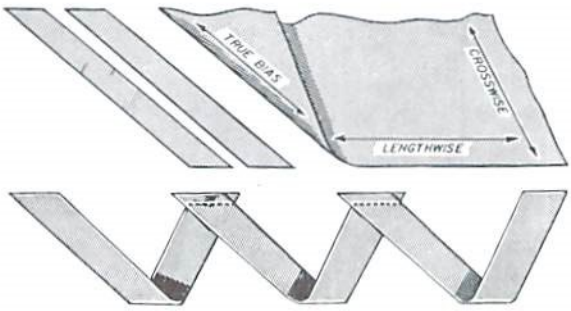
Throat plate: General purpose or straight stitch

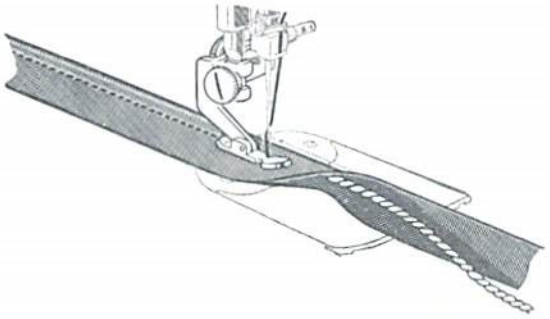
Cording foot

Piping cord comes in a variety of sizes and, when covered with a firmly woven fabric, makes a piping that is an excellent seam finish.

This piping is prepared in advance and then stitched into the seam. Cut a true bias strip 1¼ inches wide, plus three times the width of the cord, of either self or contrasting fabric. Sew strips together on the lengthwise grain to obtain desired length.

Adjust cording foot to the left side of the needle. Encase the cord in the bias strip, raw edges even. Lower presser bar. Stitch close to the cord, applying gentle tension to bias strip in front and back of the cording foot. Use a stitch length slightly longer than for regular seaming. Do not crowd the stitching against the cord.





CORDED SEAMS

Straight stitch setting: AK 3

Throat plate: General purpose or straight stitch

Cording foot

The corded seam is a professional treatment for slip covers, children's clothes, blouses and lingerie. When cording a seam the cording foot is usually adjusted to the right of the needle so that the bulk of the work will fall to the left.

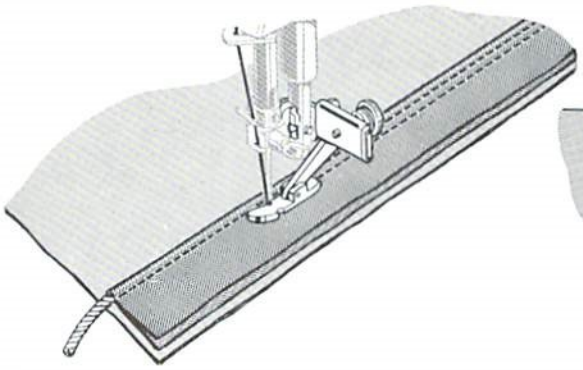
Attach the piping to the right side of a single seam edge, with the same stitch length used to make the piping (**page 73**). Guide the edge of the foot next to the cord, but do not crowd.

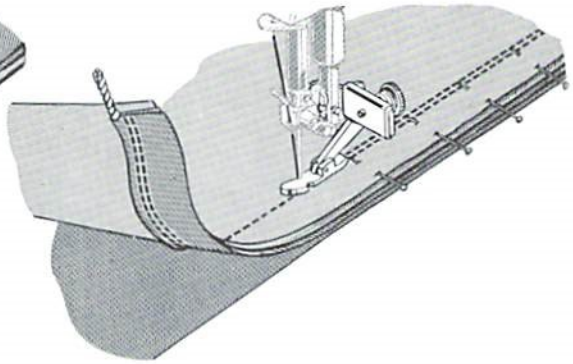
Place the attached piping over the second seam edge, and pin or baste together.

Keep the first stitching uppermost as a guide and position the seam under needle. Stitch, this time crowding the foot against the cord.

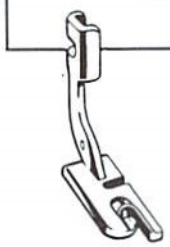
This method produces evenly joined seam edges and tightly set welting.

Curved seams are corded as easily as straight seams, except that a shorter stitch length is used. Since the seam allowance of the welting is bias, it is not difficult to shape it to the seam.





THE NARROW HEMMER



The narrow hemmer forms and stitches a perfectly turned hem without basting or pressing. It is attached to the machine in place of the regular presser foot.

APPLICATIONS

Fine hems
Edging ruffles
Hemmed seams
Hemming with lace
Lingerie finishes

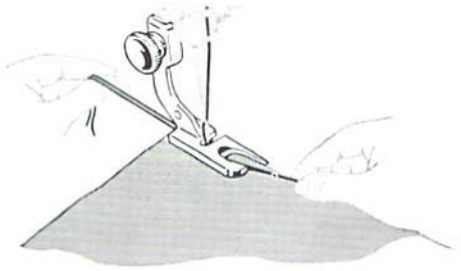
Straight stitch setting: AK 3
Throat plate: Straight stitch
Narrow hemmer

HEMMING

Crease a double 1/8" fold for about 2 inches along the edge of the fabric to be hemmed. Draw the bobbin and needle threads under the hemmer. Place the fabric under the foot and stitch the creased fold for several stitches. Hold the thread ends in the left hand and guide the raw edge in front of the hemmer evenly into the scroll. Sew slowly, still holding thread ends until the hem is well started.

Soft fabrics will enter the scroll best with the foot down; firm, crisp materials with the foot raised.

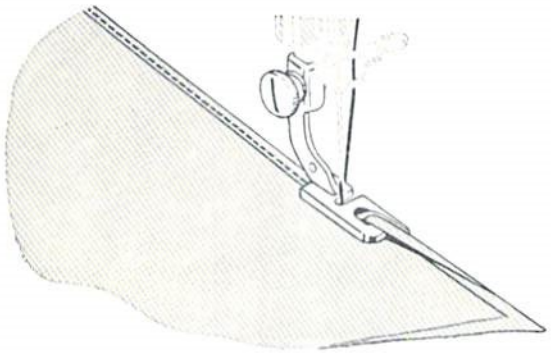
Even feeding is essential to good hemming. The same width of fabric must be kept in the scroll of the hemmer at all times. A little practice will result in perfectly formed hems.



HEMMED SEAMS

Straight stitch setting: AK 3
Throat plate: Straight stitch
Narrow hemmer

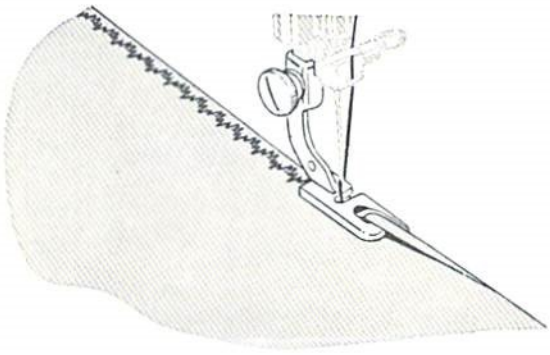
A hemmed seam is applied where a fine narrow seam is appropriate. Allow a scant ¼" seam allowance. With both sides of fabric together, place upper layer ⅛" to left of lower layer. Insert two fabric edges into hemmer and proceed as for plain hem.



DECORATIVE HEMS

Selector: All settings
Stitch Width: 2 to 4
Throat plate: General purpose
Narrow hemmer

Narrow hem edges can be turned and decorated in one operation using the narrow hemmer and a stitch pattern. This time-saving finish is especially suited to ruffle edges and aprons.



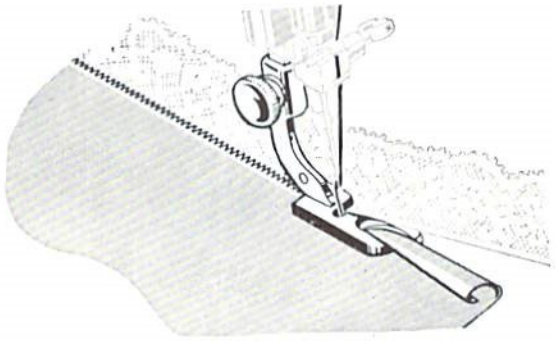
HEMMING WITH LACE

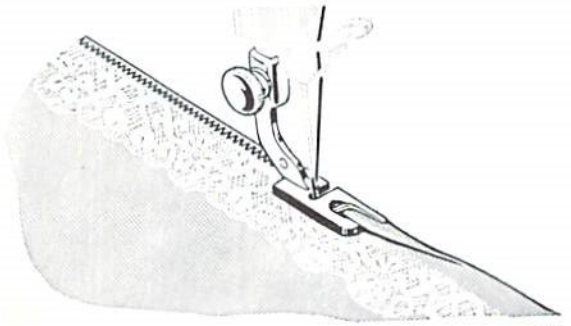
Selector setting: BL
Stitch Width: 3
Throat plate: General purpose
Narrow hemmer

Lace edgings can be applied with the Narrow Hemmer to trim lingerie hems, children's clothes, etc.

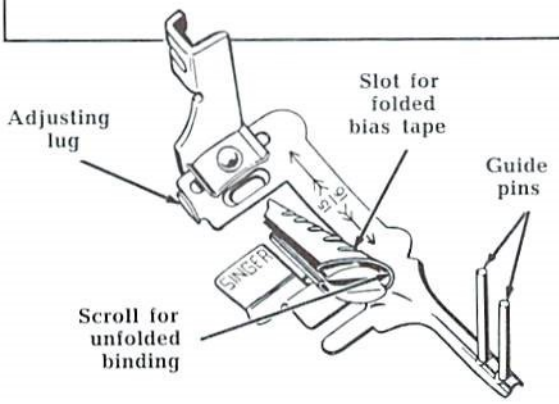
Lace Applied Over Hem. Fold and start the hem in the usual way. Starting about 1" down from the end of the lace, place the selvage under the needle and lower needle to hold lace firmly. Raise the foot slightly and slip the lace under the back portion of the foot, without disturbing the position of the fabric. Stitch slowly, guiding the fabric with the right hand, the lace with the left. Take care not to stretch the lace.

Lace Applied Under Hem. When using lace underneath the fold of a hem, the procedure is the same as when making a hemmed seam. Slip the lace in from the left as you would the second piece of fabric. This method is used where a neat finish is desired on both sides of the material.





MULTI-SLOTTED BINDER



Selector settings: All

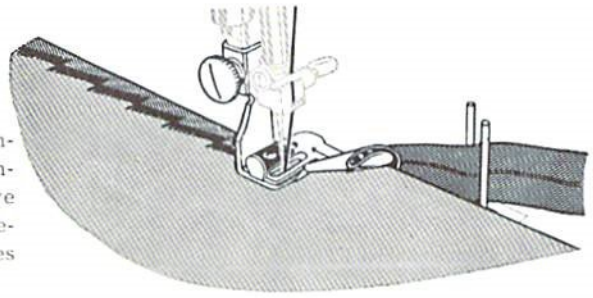
Throat plate: General purpose

The multi-slotted binder is used to apply commercial binding as well as self-fabric bias to an unfinished edge. This colourful trimming is attractive when applied to children's wear, aprons and household linens. It is a practical finish for seam edges that fray and for mabing bound seams.

Commercial single fold bias tape is inserted from the right into the slot at the wide end of the scroll. Unfolded bias $^{15}/_{16}$" wide is inserted into the opening at the end of the scroll.

Cut binding diagonally and pull through the scroll until evenly folded edges are under the needle. Free length of binding is held between the guide pins.

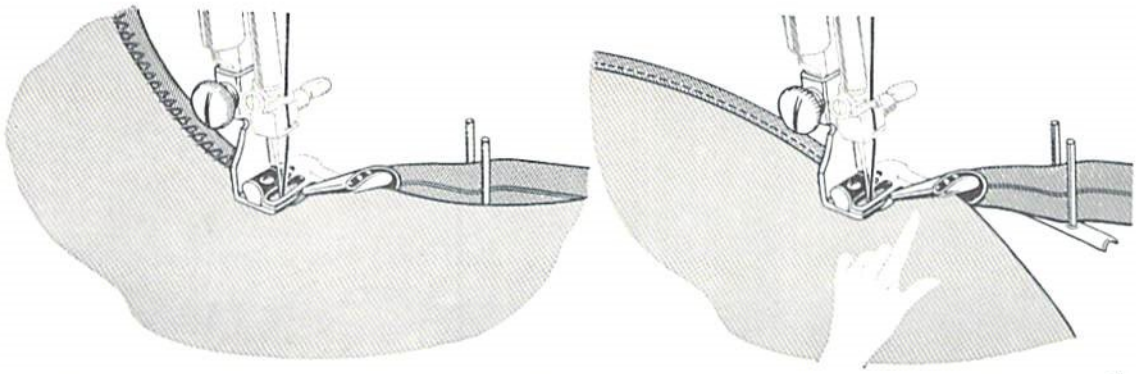
Insert the edge to be bound into the centre of the scroll. Position stitching by moving the scroll portion of the binder to the right or left by means of the adjusting lug.



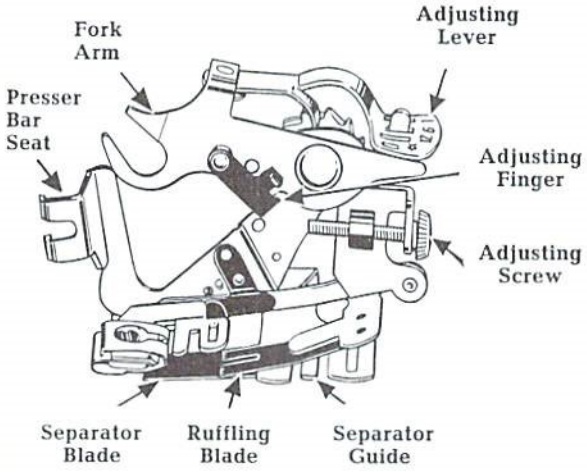
MULTI-SLOTTED BINDER (Cont'd.)

Curved edges require slightly different fabric handling from straight edges. Inside curves are straightened as they are fed into the binder. If fabric is soft and has a tendency to stretch, reinforce the edge with a single row of stitching before binding.

Outside curves tend to lead away from the centre slot of the scroll and should be guided so that a full seam width is taken at the needle point. Do not attempt to pull or straighten fabric into the full length of the scroll.



THE RUFFLER



This attachment offers a simple and effective way to make gathered and pleated ruffles. Ruffles may be made separately or made and applied at the same time. The ruffler is attached to the machine in place of the regular presser foot and is used with a straight stitch setting only.

Straight stitch setting: AK 3

Throat plate: Straight stitch

Ruffler

Adjusting Points

The adjusting lever sets the ruffler for gathers or pleats. The number **1** space setting is for gathers and places fullness at every stitch. Numbers **6** and **12** are space settings for pleats, spacing them **6** or **12** stitches apart. The star is for straight stitching and is used when grouping gathers or pleats.

The adjusting finger is used only for pleating and affects the width of the pleat. It is thrown out of action by bringing it out of contact with the adjusting screw.

The adjusting screw regulates the fullness of gathers or pleats. When turned inward to its limit with the adjusting finger in place, the attachment is set for its deepest pleat. When turned outward to its limit, with the adjusting finger out of action, the ruffler gives only a hint of fullness.

THE RUFFLER (Cont'd.)

Activating Parts

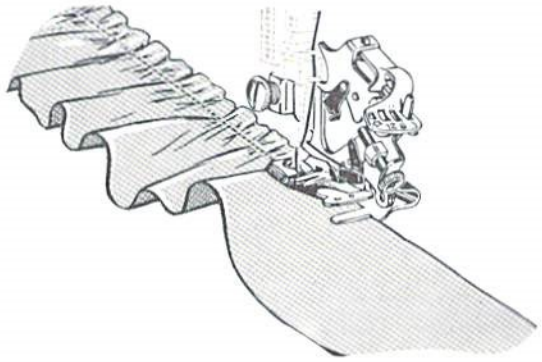
The ruffling blade and the separator blade are of blue steel and hold the material to be gathered between them. **The ruffling blade** forms the gathers or pleats by carrying the fabric to the needle according to the spacing and fullness to which the ruffler is adjusted. **The separator guide** is slotted to guide seam edges evenly and to separate the ruffle strip from the material to which the ruffle is attached.

Preparation

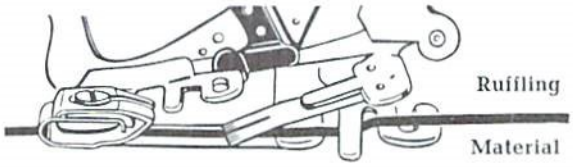
- Raise needle to its highest point.
- Locate ruffler on presser bar with fork arm over needle clamp screw. Securely tighten both presser bar and needle clamp screws.

Gathering

- Set adjusting lever on Number **1** setting and throw adjusting finger out of action.
- Turn adjusting screw for amount of fullness desired and set stitch length to space fullness. Turn screw in for more fullness; turn out for less fullness.



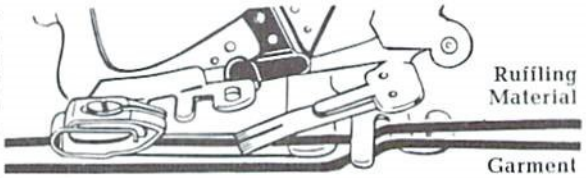
Length of sewing machine stitch also affects ruffle fullness. Since a given attachment setting puts an equal amount of fullness into each stitch regardless of its length, shortening the stitch (more stitches to the inch) makes ruffle fuller; lengthening the stitch (fewer stitches to the inch) makes it less full. For fine, closely spaced gathering, use a short stitch and an outward adjustment of adjusting screw. For deeper, less closely spaced gathering, turn adjusting screw inward and use a medium stitch length.



- Insert material to be gathered between blue blades and through first separator guide.
- Draw material to back of needle.
- Lower presser bar and stitch.

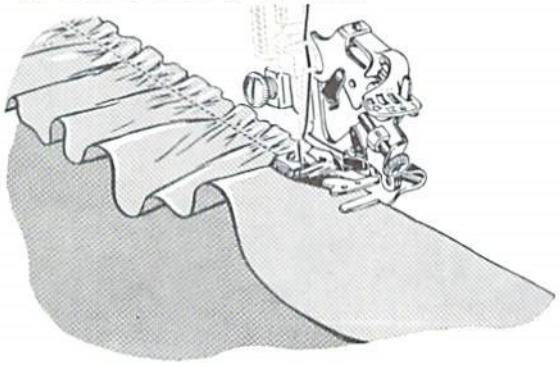
Fabric texture influences performance of ruffler as well as results. Soft fabrics, cut on crosswise grain, are best adapted for gathered fulls. Always test stitch length and ruffler setting on a scrap of self-fabric before proceeding with the actual work.

Attaching Fulls



- Place strip to be gathered between two blue blades and through first separator guide.
- Place material to which full is to be attached between separator blade and feed of machine.
- Proceed as for plain gathering.

Right sides of fabric are placed together when the seam is to fall to the inside.



Pleating

- Move adjusting lever to desired space setting for pleats either 6 or 12 stitches apart.
- Set stitch length.

For deepest pleat, set adjusting finger and turn adjusting screw inward to its maximum setting. For smaller pleats, turn adjusting screw outward.

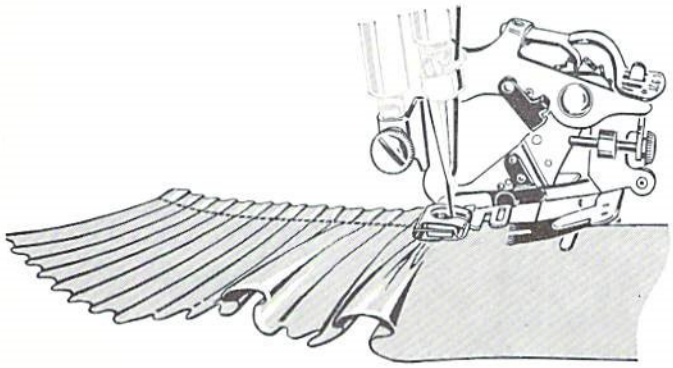
A short stitch places pleats more closely together; a long stitch separates the pleats for a greater distance.

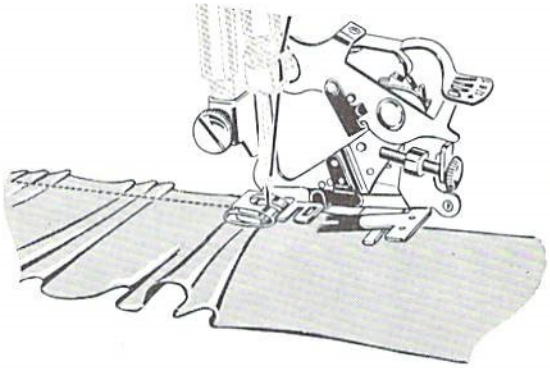
- Insert fabric to be pleated between blue blades and into first separator guide.
- Lower presser bar and stitch.

Crisp fabrics cut on the crosswise grain form the sharpest pleats. Glazed fabrics handle best if the glazed side is downward and the soft backing is next to the ruffler blade.

Group pleating

By using the star setting (straight stitching) alternately with 6 or 12 space setting, pleats are formed in groups. Even spacing between groups is accomplished by counting the number of stitches.





DARNING AND EMBROIDERY FOOT

This attachment is an aid to all who desire perfection in free motion darning and embroidery work.

The foot firmly holds the fabric as the needle enters and rises from the work, while fully revealing the line of design to be followed.

Free motion work darning

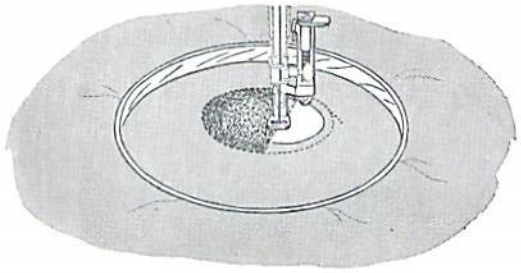
Straight stitch setting: AK 3

Feed cover plate

Darning and embroidery foot

Stitch length: Above 20

- Trim ragged edges from area to be darned. Centre worn section in embroidery hoops.
- Attach feed cover plate to machine bed in place of regular throat plate.
- Locate darning and embroidery foot on presser bar with lifting finger over needle clamp screw.



- Position work under needle and lower presser bar. Hold needle thread loosely with left hand, turn hand wheel over and draw bobbin thread up through fabric. Hold both thread ends and lower needle into fabric.
- Outline opening with running stitches ¼" from edge for reinforcement.
- Stitch across opening, moving hoops under needle at a slight angle, from lower left to upper right. Keep lines of stitching closely and evenly spaced.
- When opening is filled, turn work 90° and continue stitching until darn is completed.
- Run machine at moderate speed and control hoops with a steady continuous movement. Slow movement of hoops will produce a short stitch; more rapid movement lengthens the stitch.

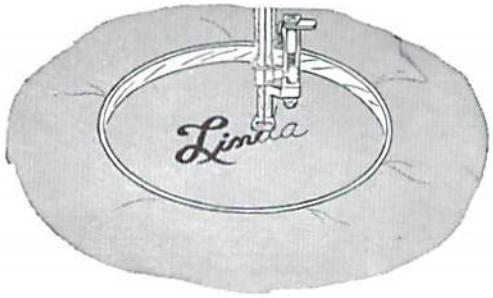
Fairly long stitches are best for knit and tricot fabrics; short stitches are best for cottons and linens as they approximate weave of fabric.

FREE MOTION WORK
MONOGRAMS — EMBROIDERY

Selector setting: BL
Stitch Width: 2 — 5
Feed cover plate
Darning and embroidery foot
Stitch length: Above 20

Script monograms and embroidery can be effectively accomplished with the zigzag stitch when the free motion principle is employed.

- Trace or mark design on right side of fabric.
- Place work in embroidery hoops large enough to encompass entire design. Be sure fabric is held taut.
- Attach feed cover plate to machine bed in place of regular throat plate.
- Locate darning and embroidery foot on presser bar with lifting finger over needle clamp screw.
- Position work under needle and lower presser bar. Bring bobbin thread up through fabric at start of design. Hold both thread ends to start stitching.



- Move hoops slowly, following outline of design. Maintain an even rate of speed so that stitches are uniformly placed.

Slow movement of hoops produces a close satin stitch; more rapid movement lengthens the stitch and results in an open effect.

Shading stitches from wide to narrow is controlled by the angle at which work is placed and moved under needle.

A test sample should always be made before proceding with the actual work to determine stitch setting and spacing. Some fabrics may require addition of un underlay of crisp lawn or organdie.

DECORATIVE STITCH PATTERNS

Examples of Stitch Patterns and their Selector Settings

DP4

DS ② 2

DS ② 3

EP2

FO2

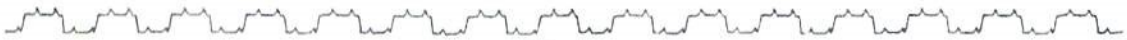
FR2

FS ① 3

DECORATIVE STITCH PATTERNS

Examples of Stitch Patterns and their Selector Settings

GM 4

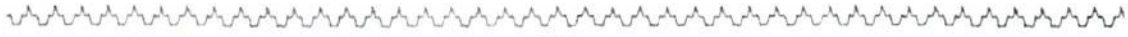


GP 4

GS ② 2

GS ③ 4

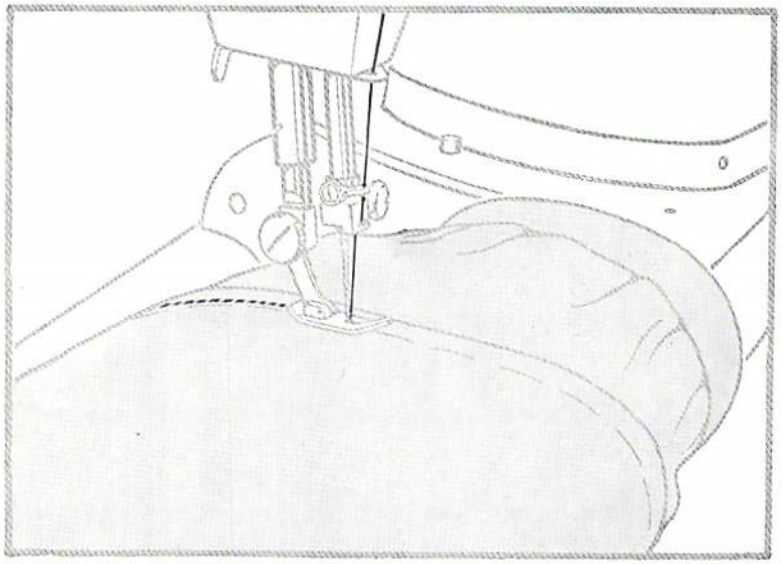
HS ③ 4

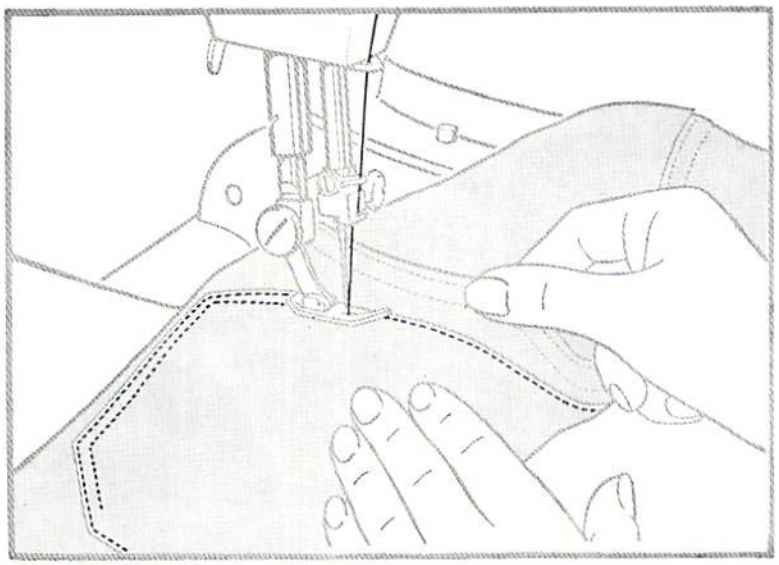


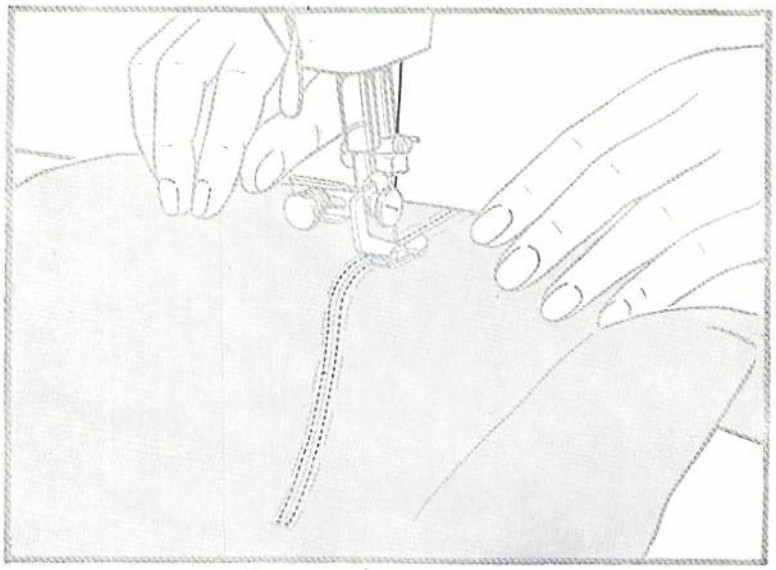
IL2

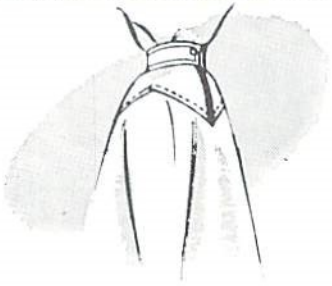
IS ① 4

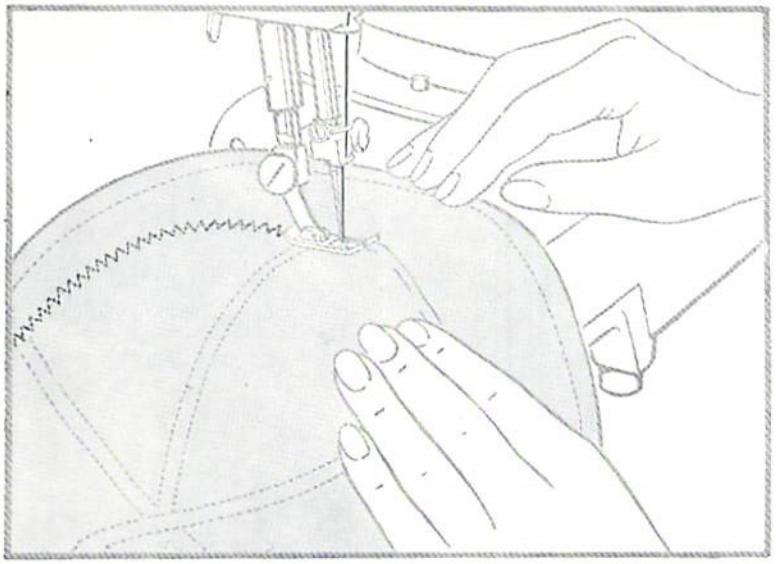
APPLICATIONS
OF THE
CYLINDER BED
FEATURE

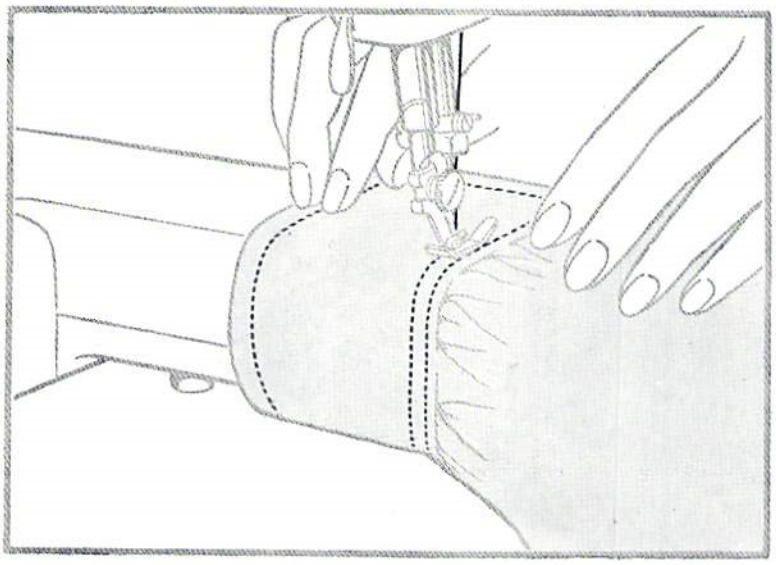


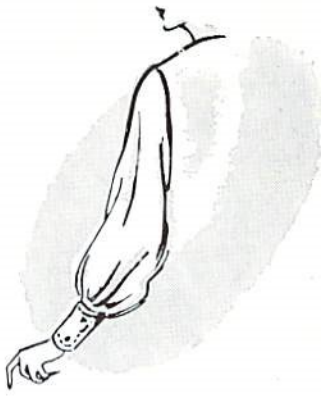


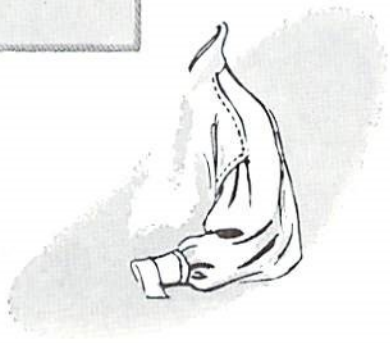


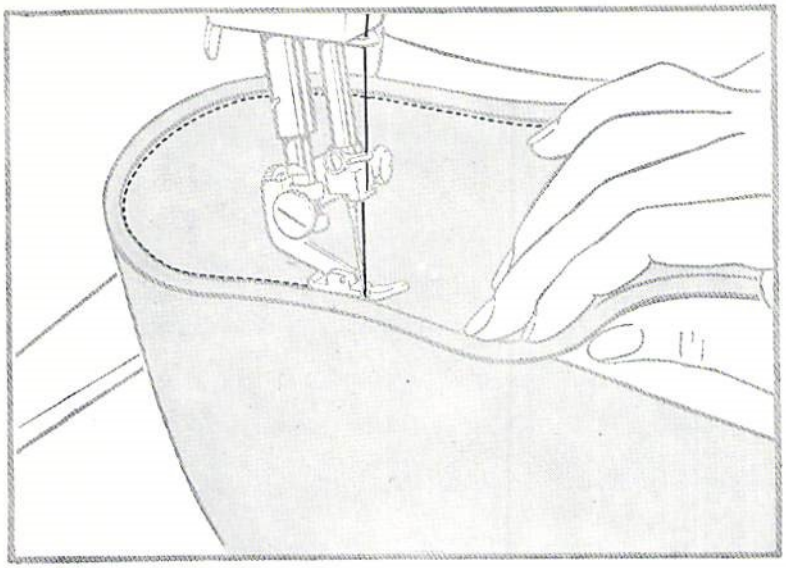


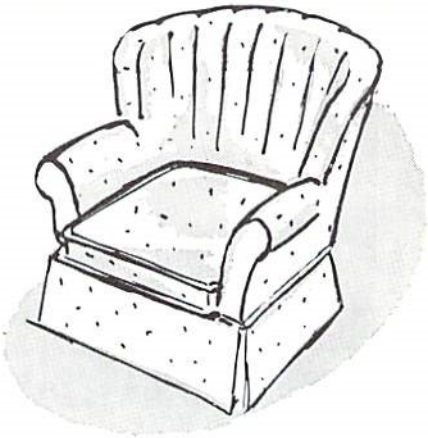


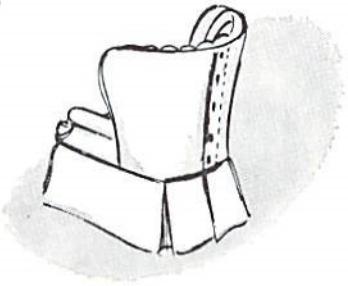




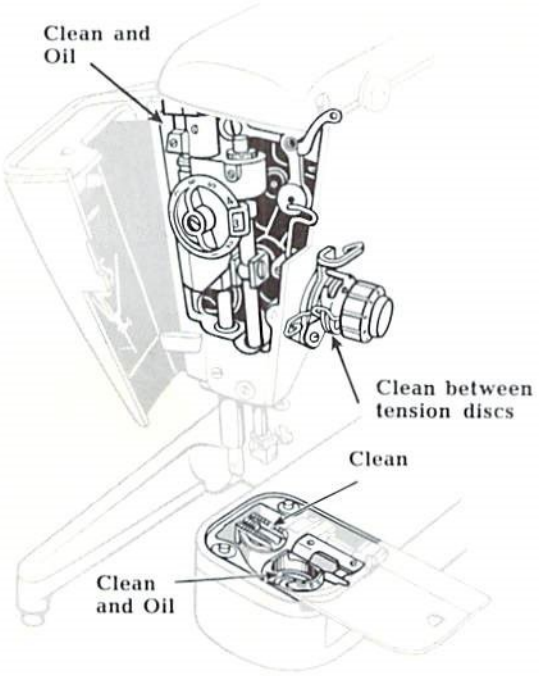








TO CLEAN THE MACHINE

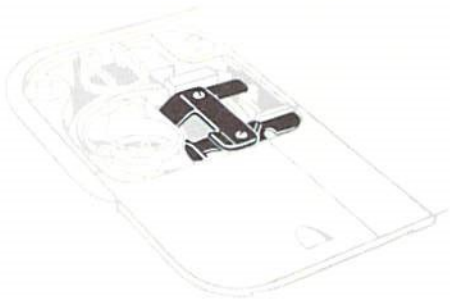


Your sewing machine was built to exacting standards of precision and workmanship. Its performance depends on the care and treatment it receives when in use and before storing it away.

When in regular use, the machine should be cleaned periodically to remove the lint and fluff which may have accumulated round the working parts. To clean the bobbin case area, see instructions for removing and replacing bobbin case on **pages 95** and **96.** Oil the machine after each cleaning as instructed on **pages 97, 98** and **99**.

If the machine is to be stored away for an indefinite period of time, a thorough brush-cleaning to remove all traces of lint and fluff, followed by swabbing of all exposed parts with a lint-free brush saturated with SINGER* Oil, is necessary to protect the machine against rust damage. The areas that should be cleaned and covered with a protective coat of oil are shown in the illustration at the left.

TO REMOVE AND REPLACE BOBBIN CASE



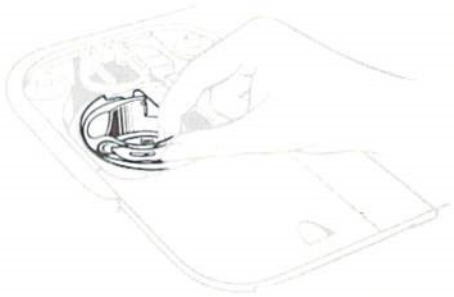
To clean hook raceway, remove bobbin case as follows:

1. Remove throat plate (see **page 19**) and open slide plate (see **page 13**).

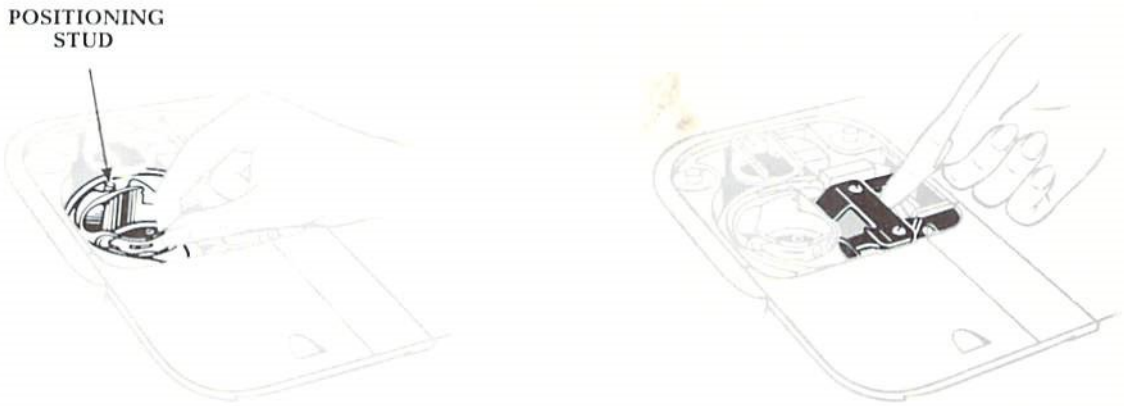
2. Unlock bobbin case by lifting and pulling holder to right as shown.

3. Remove bobbin case from machine.

4. Remove all lint, fluff, loose thread ends or any other foreign matter which might clog the machine.

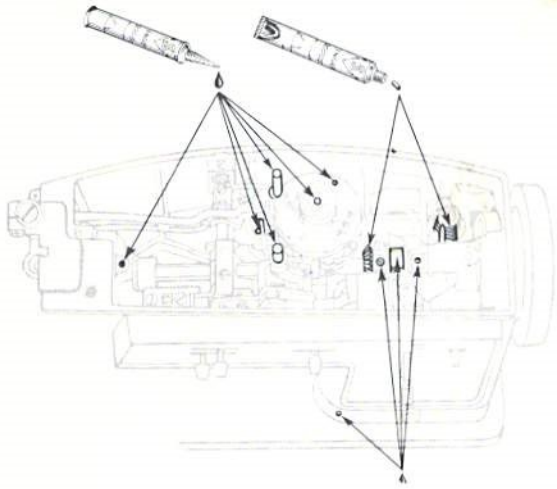


TO REMOVE AND REPLACE BOBBIN CASE



5. Replace bobbin case so that groove under tension spring fits on hook raceway and fork of case straddles positioning stud.
6. Push bobbin case holder to left as shown until it snaps down into lock position.
7. Close bed slide and replace throat plate.

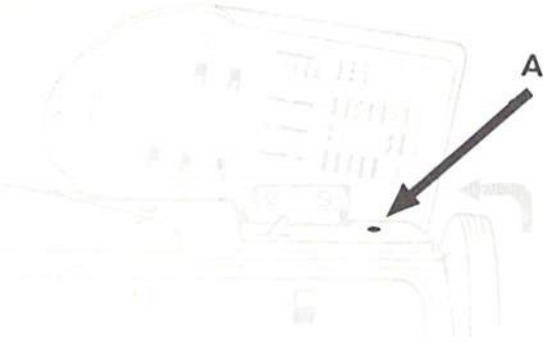
TO LUBRICATE THE MACHINE



Use SINGER Oil and SINGER Lubricant!

Both are extra quality products especially prepared for sewing machines, and should always be used in the care of your 631.

Clean the machine periodically as instructed on **page 94.**



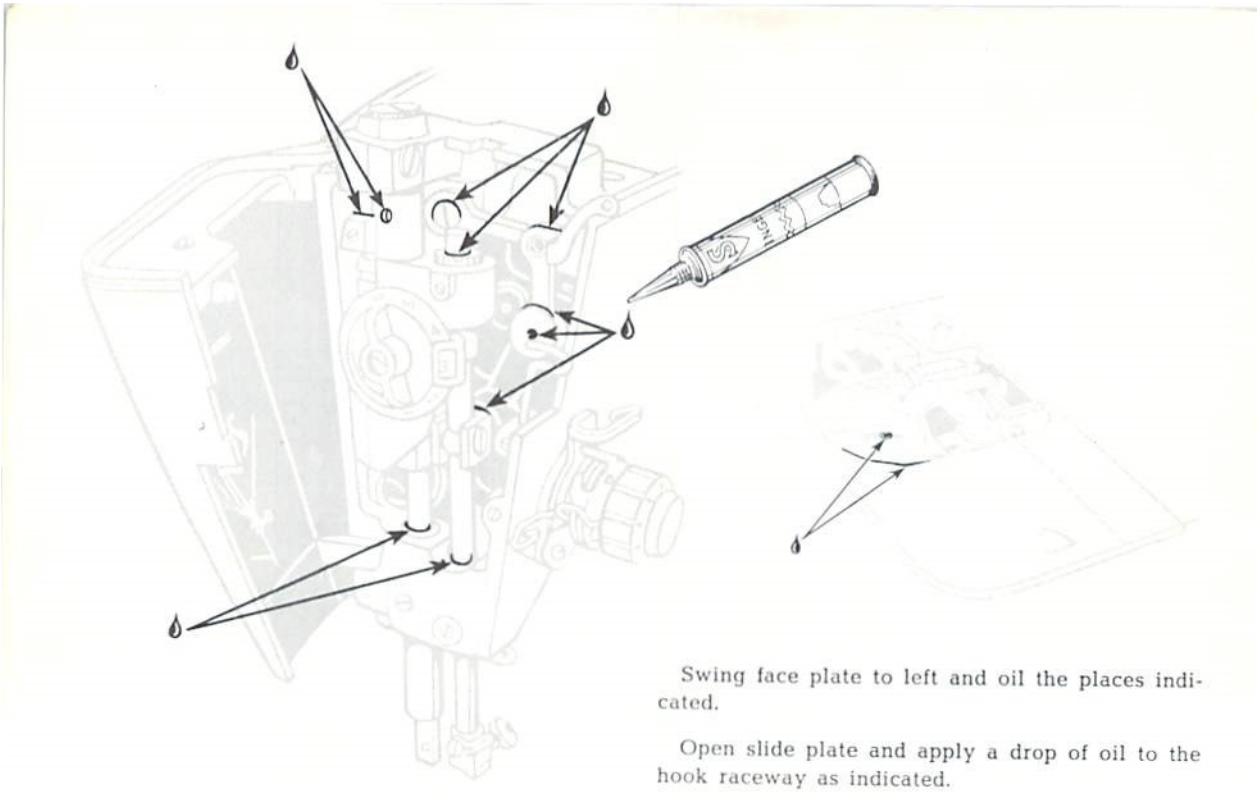
Apply a drop of oil to each place indicated.

Remove screw A and lift arm top cover slightly and slide off toward left and away from machine. The thread take-up lever must be in its lowest position.

Apply a small amount of lubricant to the gears as shown.

A tube of this lubricant can be purchased at your Singer Sewing Centre.

Never apply Oil to these gears.

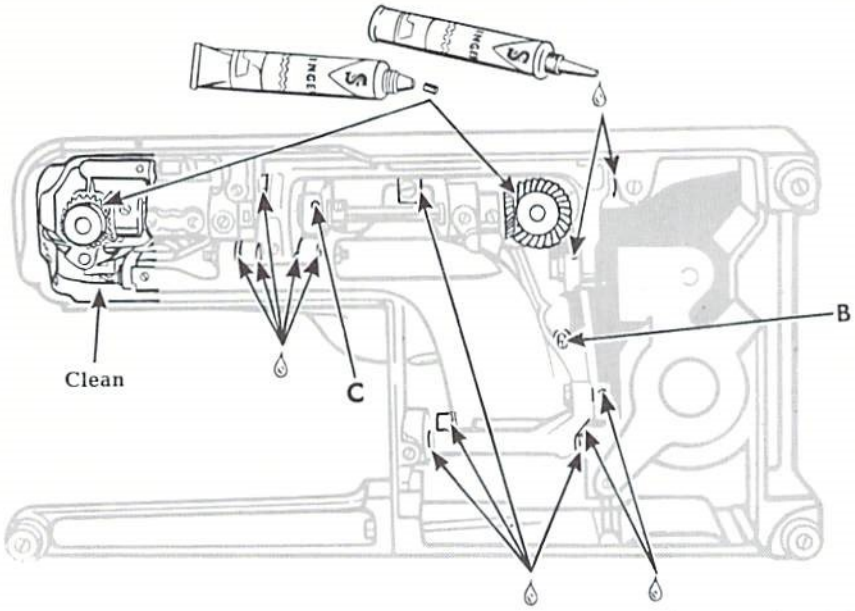


Swing face plate to left and oil the places indicated.

Open slide plate and apply a drop of oil to the hook raceway as indicated.

Close slide plate, replace arm top cover and close face plate.

TO LUBRICATE THE MACHINE (Cont'd.)



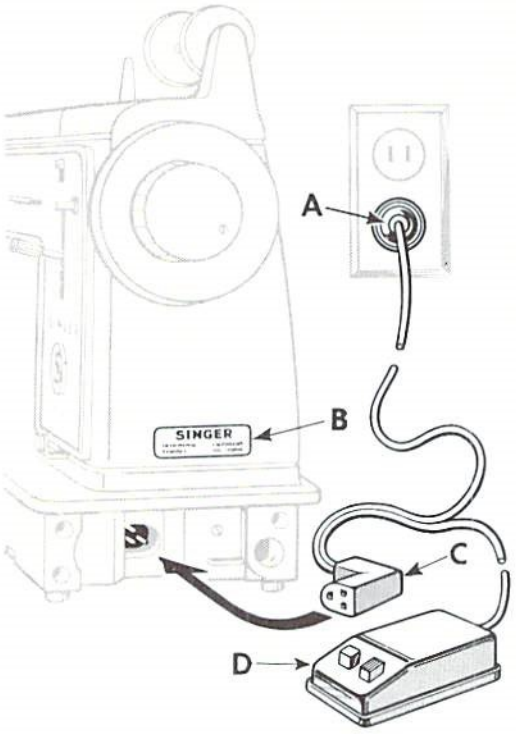
Tilt machine back and remove thumb nut from screw **B**, being careful not to lose felt washer, and remove cover from underside of machine.

Remove screw **C** and remove cylinder cover.

Clean hook and gear area, oil each of the places indicated, and occasionally apply a small quantity of lubricant to teeth of gears as shown.

Replace bottom cover and cylinder cover.

The motor requires no lubrication.



The SINGER* Electric Motor in the electric machine is furnished for operation on an alternating or direct current. Orders must state the catalogue number of the motor, or the voltage, and in the case of alternating current, the number of cycles.

Before Inserting Electric Plug A, be sure that voltage and cycles stamped on electrical nameplate **B** are within range marked on your electric meter installed by your power company.

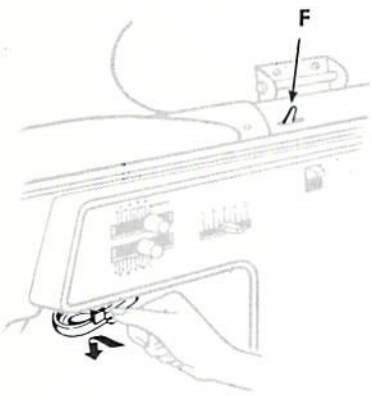
Electrical Connections for Machine. Push 3-pin terminal plug **C** on 3-pin terminal block at right of machine and connect plug **A** at other end of cord to electric outlet.

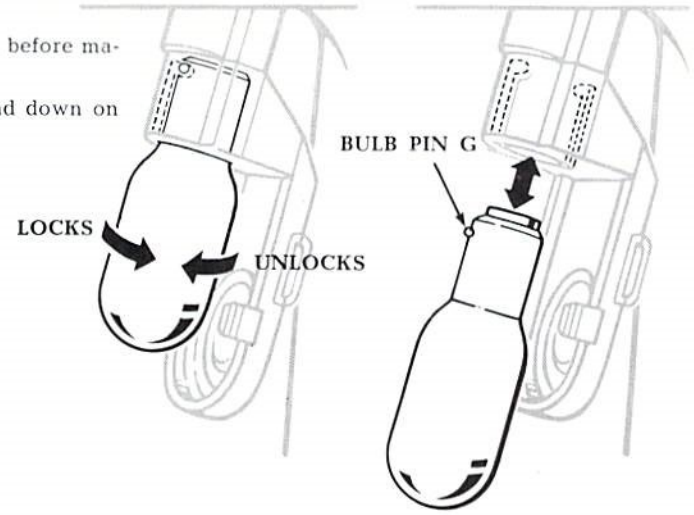
Speed Controller. The speed of machine is regulated by amount of pressure on the pedal of the foot controller **D.**

To replace Singer Bulb.

Disconnect plug from electrical outlet before making bulb replacement.

With thumb of right hand push in and down on tab of light lens (see Illustration).





Do not attempt to unscrew bulb, press it into socket and at same time turn bulb over in direction shown to unlock bulb pin **G**, then withdraw bulb.

Press new bulb into socket with bulb pin **G** entering slot of socket and turn it over in direction shown to lock bulb pin **G** in proper position.

The light is turned "on" or "off" by the switch **F**.

INDEX

Applications of Cylinder Bed Feature . . 88—93
Appliqué . . . . . 53—54
Attachments
  Button Sewing Foot . . . . . 58—59
  Darning and Embroidery Foot . . . 84—85
  Narrow Hemmer . . . . . 75—77
  General Purpose Foot . . . . . 60—66
  Multi-slotted Binder . . . . . 78—79
  Ruffler . . . . . 80—83
  Seam Guide . . . . . 67—69
  Special Purpose Foot . . . . . 49—57
  Cording Foot . . . . . 70—74
Basting . . . . . 20—25
Binding . . . . . 78—79
Blanket Binding, Replacing of 64
Blind Stitching
  Hems 69
  Zip Insertion 72
Bobbin
  Preparing for Stitching 28
  Removing 13
  Thread Tension 34
  Winding . . . . . 10—12
Bobbin Case
  Removal and Replacement . . . . 95—96
  Threading 14
Buttonholes . . . . . 49—52
  Corded 52
Button Sewing . . . . . 58—59
Chain Stitch Fittings . . . . . 20—25
Cleaning the Machine . . . . . 94—96
Combination Patterns and Variations . . 43
  Illustrations . . . . . 86—87
Corded Appliqué 54
Corded Buttonholes 52
Cording
  Seams 74
  Welting 73
Cording Foot . . . . . 71—74
  Piping and Corded Seams . . . . 73—74
  Zip Insertion . . . . . 71—72
Couching 57
Cylinder Bed, Applications . . . . 88—93
Darning and Embroidery Foot . . . . 84—85
Darning, Free Motion Work 84
Darts . . . . . 73—74
  Interfacing 74
  Single Thread 73
Decorative Hems 76
Decorative Stitch Patterns . . . . . 86—87
Designs and Motifs 55
Detachable Cloth Plate 5
Elastic, Applications 65
Electrical Information . . . . . 100—101
  Light 101
  Motor 100
Embroidery, Free Motion Work . . . 85
Features . . . . . 2—3
  Principal Parts of Machine 15
Feed Cover Plate
  Button Sewing . . . . . 58—59
  Free Motion Work . . . . . 84—85
Filler Cord, Threading 52
Free Motion Work . . . . . 84—85
Gathering . . . . . 81—82
General Purpose Foot, Applications . . 60—66
Guiding and Supporting Fabric . . . 31
Hemmed Seams 76

Hemming with Lace 77
Hems
  Blind Stitched 69
  Decorative 76
Knit Fabric Seams 61
Lace
  Appliqué 54
  Edging and Insertion 57
Length of Stitch, Regulating 16
Light Bulb, Replacement 101
Lubricating . . . . . 97—99
Mending 65
Monograms and Motifs 55
  Free Motion Work 85
Motor 100
Multi-slotted Binder . . . . . 78—79
Narrow Hemmer . . . . . 75—77
  Decorative Hems 76
  Hemmed Seams 76
  Hemming with Lace 77
Needle and Thread Selection 6
Needle and Thread 7
Needle Insertion . . . . . 7 and 44
Needle Position and Stitch Width Selector 17
Needle Positions 43
Needle Thread Tension
  Satin Stitching 37
  Straight Stitching 33
Needle Threading
  Single 9
  Two 45
Oiling . . . . . 97—99
Overcasting 62
Piping 73
Pleating 83
Prepare to Sew 28
Pressure Adjustments 32
Primary Patterns . . . . . 38—42
  Control of Width 41
  Needle Positions 42
  Special Discs . . . . . 39—40
  Stitch Width and Stitch Pattern Selectors 38
Principal Parts of Machine 15
Reverse Stitching
  Application . . . . . 29—30
  Regulation 16
Ruffler . . . . . 80—83
  Attaching Ruffle 82
  Gathering . . . . . 81—82
  Pleating 83
Satin Stitching
  Stitch Length Adjustment 36
  Tension Adjustment 37
Scalloping 66
Seam Finishes 62
Seam Guide . . . . . 67—69
  Blind Stitched Hems 69
  Seams . . . . . 67—68
  Top Stitching 68
Seams
  Corded 74
  Flat Felled 61
  Guiding and Supporting 31
  Lingerie 60
  Sheer Fabrics 56
  Straight . . . . . 29—30
SINGER Service 4
Special Discs
  Primary Patterns 39
  Removal and Replacement 40
Special Purpose Foot, Applications . . 49—57

Spool Holder 8
Stitch Length
Regulator 16
Satin Stitch Adjustment 36
Stitch Pattern Selector, Operation . . . 18
Stitch Patterns
Combinations and Variations . . . 43
Illustrations . . . . . 86—87
Special Discs . . . . . 39—40
Stitch Width and Needle Position Selector
Combinations and Variations . . . 43
Control of Width 41
Operation 17
Straight Stitching
Equipment and Settings 26
Seams . . . . . 29—31
Secondary Positions 27
Two Needles 46
Tension Adjustments
Bobbin Thread 34
Needle Thread 33
Satin Stitching 37
Threading
Bobbin Case 14
Filler Cord 52
Single Needle 8
Two Needles 45
Throat Plate
Removal and Replacement 19
Straight Stitch 26
Zigzag Stitch 35
Top Stitching 68
Two Needles
Insertion 44
Primary Patterns 47
Straight Stitching 46
Threading 45
Variations and Combination Patterns . . 43
Illustrations . . . . . 86—87
Winding a Bobbin . . . . . 10—12
Zigzag Stitching
Combinations and Variations . . . 43
Equipment 35
Needle Positions 42
Primary Patterns 38
Special Discs . . . . . 39—40
Stitch Length Adjustment 36
Stitch Width Selector: Control of Width 41
Tension Adjustment 37
Two Needles 47

To all whom it may concern:

The improper placing or renewal of the trademark **SINGER** or any other of the trademarks of The Singer Company (all of which are duly Registered Trademarks) on any machine that has been repaired, rebuilt, reconditioned, or altered in any way whatsoever outside a SINGER factory or an authorized SINGER agency is forbidden.

For your protection

SINGER Sewing Machines are sold and serviced wherever you see the famous SINGER and Red "S" Trademarks. When your machine needs servicing call your SINGER SEWING CENTRE to be sure of warranted SINGER parts and service. See address in the telephone directory.